

LBT-A390

SERVICE MANUAL

*AEP Model
E Model
Australian Model*

- LBT-A390 is composed of following models.

As for the service manual, it is issued for each component model,
then, please refer to it.

COMPONENT MODEL NAME FOR THESE SYSTEM

	LBT-A390				
	AEP	G	E2	E3	AUS
STEREO DECK RECEIVER	HCD-A390				
TURN TABLE	PX-LX56P				
SPEAKER SYSTEM			SS-D390		

G : GERMANY
AUS : AUSTRALIA
E2 : CENTRAL AND SOUTH AMERICA
E3 : CHILI, PERU, BOLIVIA, ARGENTINA

PARTS LIST

Part No.	Description	Part No.	Description
1-501-374-11	ANTENNA , LOOP	A-4674-087-A	TURN TABLE MAT ASSY(PS-LX56P)
1-501-536-11	ANTENNA (AEP)	1-467-491-11	COMMANDER , STANDARD (RM-S321)(HCD)
1-501-659-31	ANTENNA(FM) (Except AEP,G)	2-181-754-21	COVER(MLY), BATTERY(RM-S321)
3-758-164-11	MANUAL, INSTRUCTION (AEP) (ENGLISH , FRENCH , SPANISH , PORTUGUESE)	* 3-376-136-01	CUSHION(CASSETTE HALF)(HCD)
3-758-164-41	MANUAL, INSTRUCTION (AEP,G) (GERMAN , DUTCH , SWEDISH , ITALIAN)	* 4-947-532-01	SNOW BOX (L)(PS-LX56P)
3-758-164-51	MANUAL, INSTRUCTION (AEP) (DANISH , FINNISH)	* 4-947-533-11	SNOW BOX (R)(PS-LX56P)
3-758-165-11	MANUAL, INSTRUCTION (AUS,E) (ENGLISH , FRENCH , SPANISH , CHINESE)	* 4-963-204-01	CUSHION(HCD)
* 4-963-198-01	INDIVIDUAL CARTON(AEP,G)	* 4-963-202-01	SPACER(A)
* 4-965-395-01	INDIVIDUAL CARTON(E2)	* 4-963-203-01	SPACER(B)
* 4-965-396-01	INDIVIDUAL CARTON(E3)	* 4-957-893-11	CUSHION(SS-D390)
* 4-965-397-01	INDIVIDUAL CARTON(AUS)		

NOTE :

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

COMPACT HI-FI STEREO SYSTEM
SONY®



9-959-362-11

Sony Corporation
Audio Group

English
94B0470-1D
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Published by Audio Sector Quality Assurance Dept.

HCD-A390

SERVICE MANUAL

*AEP Model
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HCD-A390 is the tuner, deck, CD and amplifier section in LBT-A390 respectively.

CD Section	Model Name Using Similar Mechanism		HCD-A290
	CD Mechanism Name		CDM14-5BD13
	Base Unit Name		BU-5BD13
DECK Section	Model Name Using Similar Mechanism		HCD-H650/H650M
	Tape Transport Mechanism	Deck A	TCM-190RA12AL
	Type	Deck B	TCM-190RB53A

SPECIFICATIONS

Tuner System

FM stereo
FM/AM superheterodyne tuner

FM tuner section

Tuning range 87.5 to 108MHz
Antenna 300 ohms balanced
75 ohms unbalanced

Intermediate frequency 10.7MHz

AM tuner section

Tuning range MW: 531 to 1,602kHz
LW: 153 to 279kHz (AEP, EE)
Antenna AM loop antenna
External antenna terminal
Intermediate frequency 450kHz

Amplifier

DIN power output 40W+40W (6 ohms, at 1kHz)
Continuous RMS power output 45W+45W (6 ohms, at 1kHz, 5% THD)
Music power output 70W+70W (6 ohms)

Input	Jack type	Sensitivity	Impedance
PHONO	Phono	3 mV	47 kilohms
VIDEO	Phono	300 mV	47 kilohms

Output	Jack type	Impedance
SURROUND SPEAKER	Phono	Accepts speakers of 16 ohms
HEADPHONES	Stereophone	Accepts headphones of 8 ohms or more

Frequency response 15Hz to 50kHz ± 3 dB

Cassette deck

Recording system 4-track 2-channel stereo
Frequency response DOLBY NR OFF
With Type II cassette (Sony UX-S) 40Hz to 14kHz (± 3 dB)
With Type I cassette (Sony HF-S) 40Hz to 13kHz (± 3 dB)
Wow and flutter W. PEAK $\pm 0.2\%$ (DIN)

—continued on next page—

COMPACT DISC DECK RECEIVER
SONY[®]



Compact disc player

Laser	Semiconductor laser
Wavelength	780—790nm
Laser output	Max. 44.6 μ W*
	* This output is the value measured at a distance of about 200mm from the objective lens surface on the Optical Pick-up Block.
Frequency response	2Hz to 20kHz $\pm$ 0.5dB
Signal-to-noise ratio	More than 93dB
Dynamic range	More than 90dB
Harmonic distortion	Less than 0.008% (1kHz)
Channel separation	More than 90dB (1kHz)

General

Power requirements	220—230V AC, 50/60Hz (AEP, EE) 110—120V/220—240V AC, 50/60Hz (E) 240V AC, 50/60Hz (AUS)
Power consumption	130W (AEP, EE) 140W (E, AUS)
Mass	Approx. 9.3kg (20 lb 8 oz)
Dimensions	Approx. 355 $\times$ 380 $\times$ 355mm (14 $\times$ 15 $\times$ 14 inches) (w/h/d, including projections)

Supplied accessories

Remote commander RM-S321	(1)
Batteries Sony SUM-3 (NS)	(2)
FM wire antenna	(1) (AEP3, E, AUS)
AM loop antenna	(1) (AEP3, E, AUS)
45-rpm adaptor	(1) (AEP3, E2 : Supplied with the turntable)

Design and specifications are subject to change without notice.

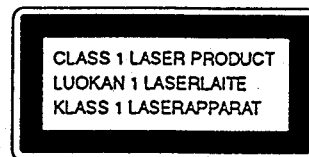
• Abbreviations

EE	: East European model
AUS	: Australian model
AEP3	: AEP unit with PHONO POWER SOURCE (Made in Indonesia)
E2	: AC 120V Area model

SAFETY-RELATED COMPONENT WARNING!!

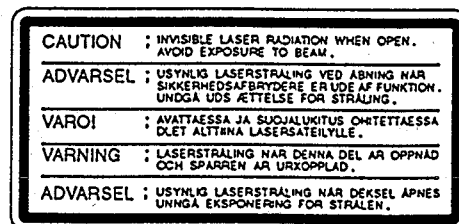
COMPONENTS IDENTIFIED BY MARK Δ OR DOTTED LINE WITH MARK Δ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.



Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

The following caution label is located inside the unit.



Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

"DOLBY" and the double-D symbol $\square\square$ are trademarks of Dolby Laboratories Licensing Corporation.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Location of Controls

Refer to the pages indicated in parentheses for details.

Tuner

- 1 SYSTEM POWER switch (12)
- 2 MEMORY button (18)
- 3 STEREO/MONO button (16)
- 4 Display window
- 5 BAND button (16)
- 6 SHIFT button (18)
- 7 PRESET STATION'S numeric buttons (18)
- 8 DUAL MODE TUNING +/- buttons (16, 18)

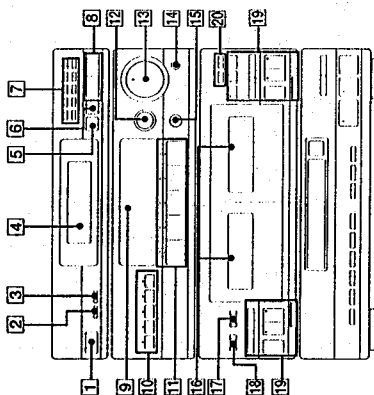
Amplifier

- 9 SPECTRUM ANALYZER display (14)
- 10 PRESET EQUALIZER buttons and indicators (14)
- 11 Function selectors and indicators
- 12 DBFB (dynamic bass feedback) control (14)
- 13 VOLUME control (14)
- 14 HEADPHONES jack (14)
- 15 SURROUND control (14)

Cassette Deck

- 16 Cassette holders
- 17 DIRECTION MODE selector (20, 22, 26, 30)
- 18 DOLBY NR (noise reduction) switch (20, 26)
- 19 Tape operation buttons (20, 26, 28)
- 20 (AMS*) Leftward fast winding button
- 21 (AMS*) Rightward fast winding button
- 22 Forward play button and indicator
- 23 Reverse play button and indicator
- 24 Stop button
- 25 EJECT button
- 26 PAUSE button and indicator (deck B only)
- 27 REC Record button and indicator (deck B only)
- 28 REC MUTE button (deck B only)
- 29 DUBBING SPEED (HIGH/NORMAL) buttons and indicators (30, 32)

* AMS is the abbreviation of Automatic Music Sensor.



SECTION 1 GENERAL

This section is extracted from instruction manual.

Location of Controls

Compact Disc Player

- 21 Disc Tray
- 22 TIME button (36)
- 23 REPEAT button (50)
- 24 MUSIC SCAN button (48)
- 25 CHECK (program check) button (44)
- 26 CLEAR (program clear) button (44)
- 27 EDIT button (52)
- 28 OPEN/CLOSE button (34)
- 29 (stop) button (34)
- 30 (AMS*) buttons (38)
- 31 PLAY MODE buttons
- 32 CONTINUE button (40, 44, 54)
- 33 SHUFFLE button (40)
- 34 PROGRAM button (42, 46)
- 35 (play) button and indicator (34)
- 36 (pause) button and indicator (34)

* AMS is the abbreviation of Automatic Music Sensor.

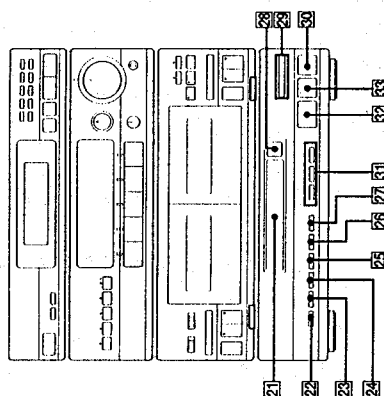
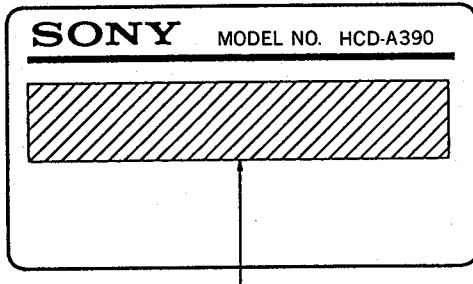


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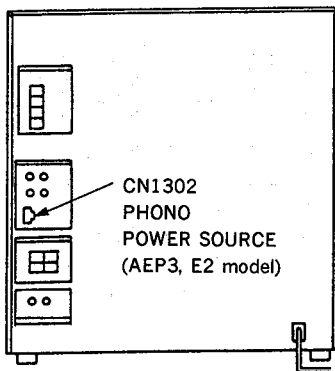
—Label Model Number—



AEP, EE model: COMPACT DISC DECK RECEIVER
AC: 220—230V~50/60Hz 130W
E model : COMPACT DISC DECK RECEIVER
AC: 110—120V/220—240V~50/60Hz 140W
AUS model : COMPACT DISC DECK RECEIVER
AC: 240V~50/60Hz 140W

• Abbreviations

EE : East European model
AUS : Australian model
AEP3: AEP unit with PHONO POWER SOURCE (Made in Indonesia)
E2 : AC 120V Area model



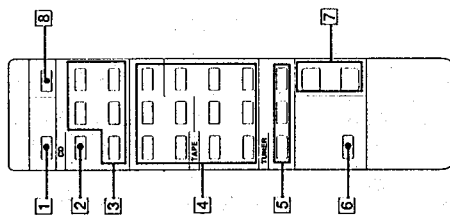
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Location of Controls

Remote Commander RM-S321

- 1 FUNCTION button
Each time this button is pressed, the function mode changes among VIDEO, TAPE, CD, TUNER and PHONO.
- 2 This button is inoperative with this unit.
- 3 CD operation buttons
◀◀ / ▶▶ (AMS*) buttons, ▶ (play) button, ⏸ (pause) button, ■ (stop) button
- 4 TAPE DECK A and DECK B operation buttons
◀◀ / ▶▶ (AMS*) buttons, ▶ / ▶▶ Play buttons, ■ Stop buttons
DECK B only
● Recording button, ⏸ Pause button
- 5 Tuner operation buttons
SHIFT button
PRESET +/- buttons
These buttons are used to select the preset station number.
- 6 SELECT 5 button
Each time the button is pressed, the preset equalization switches among 5 preset patterns (FLAT, DANCE, POPS, ROCK and CLASSIC).
- 7 VOL (volume) +/- buttons
- 8 SYSTEM POWER button

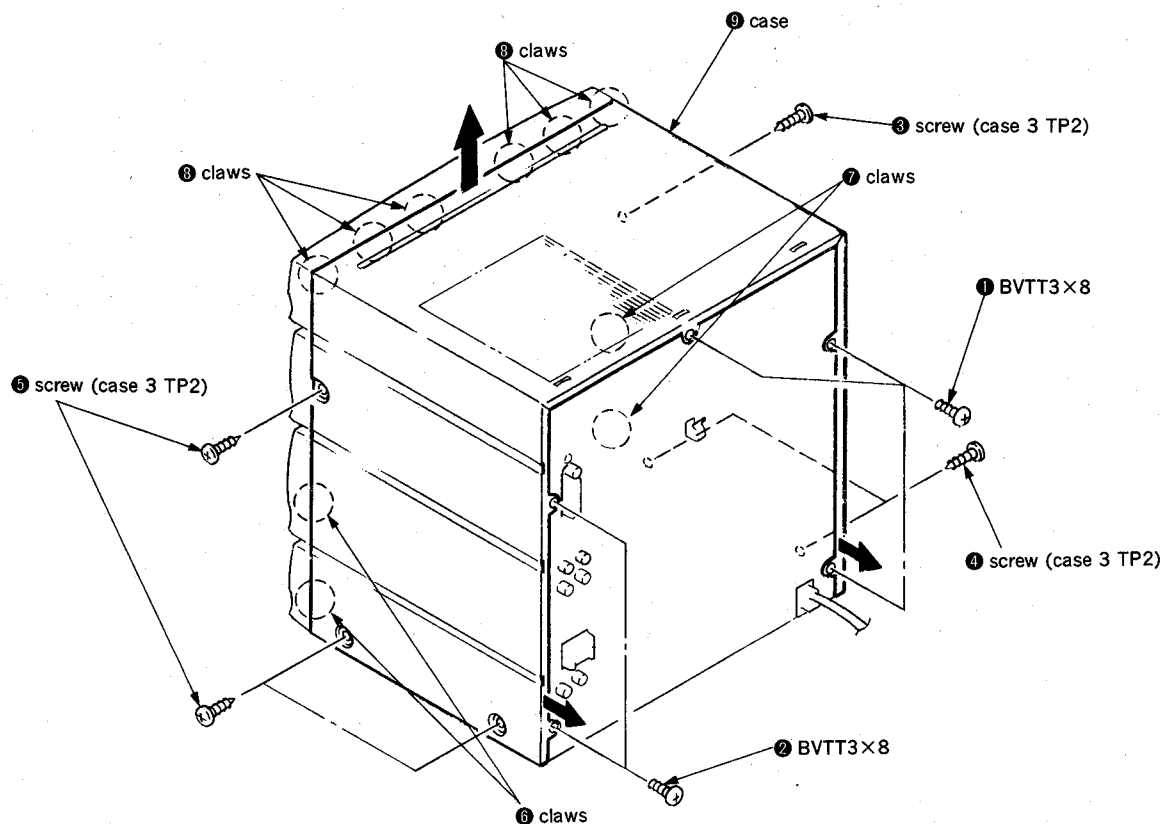
* AMS is the abbreviation of Automatic Music Sensor.



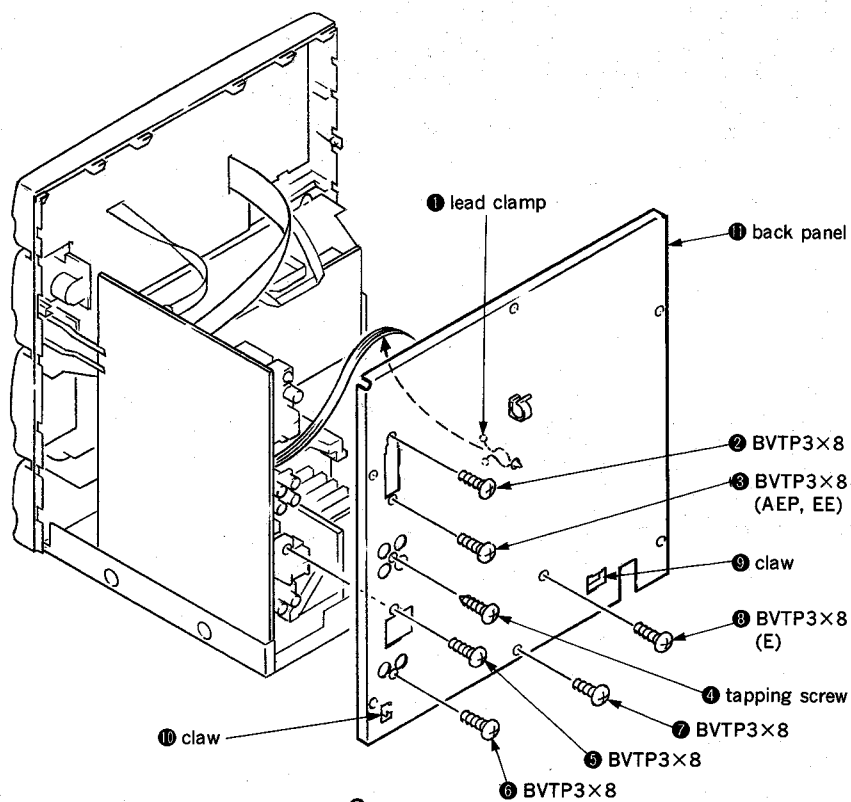
SECTION 2 DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

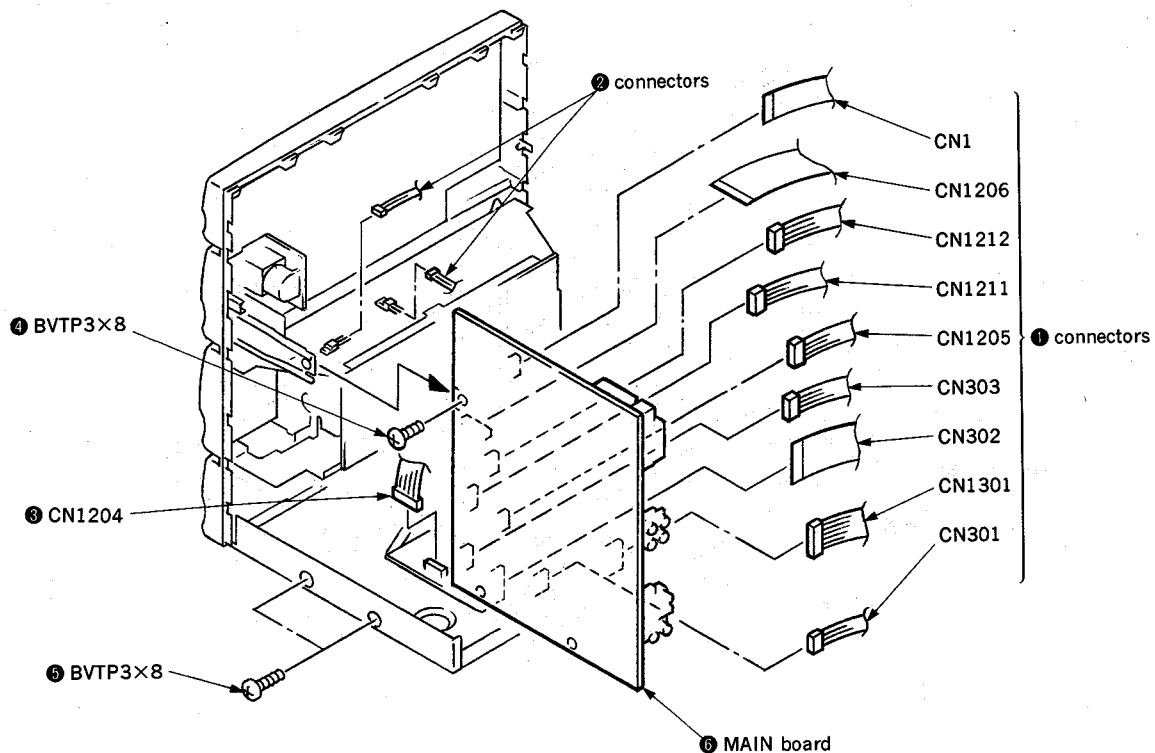
2-1. CASE



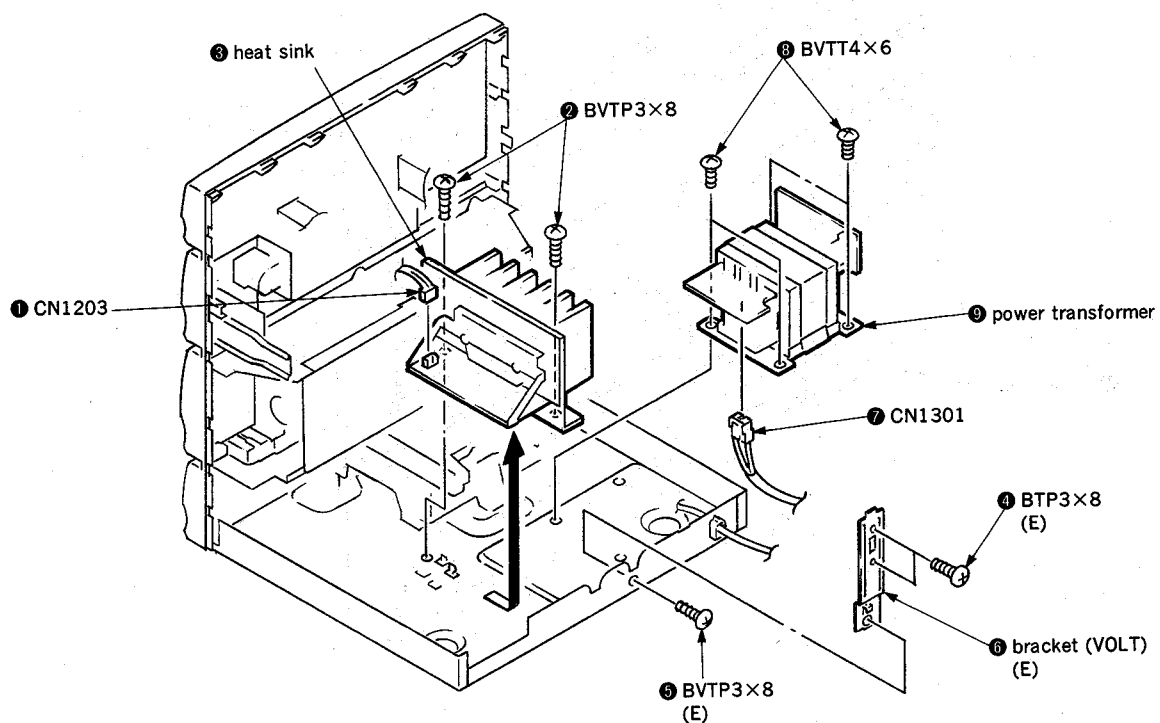
2-2. BACK PANEL



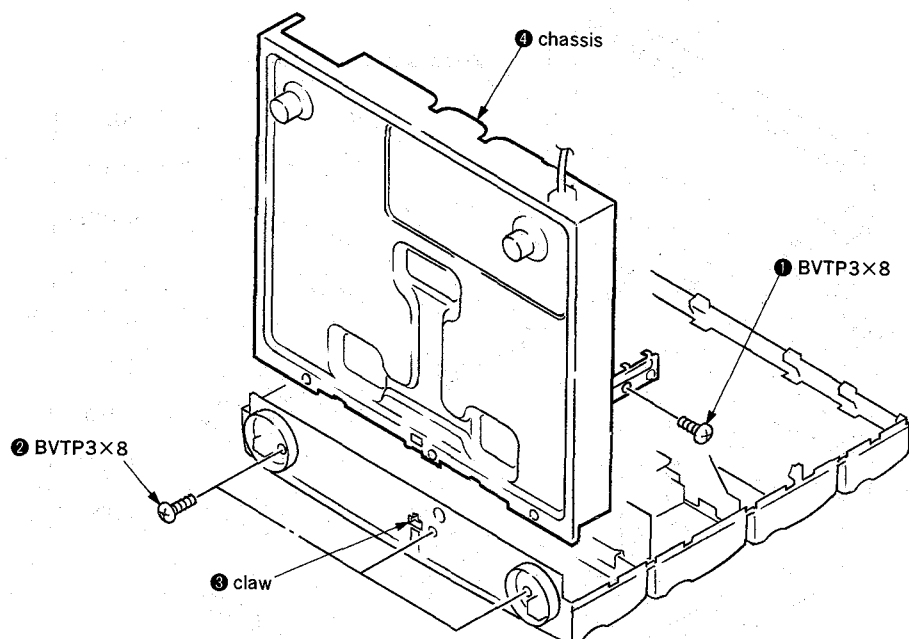
2-3. MAIN BOARD



2-4. POWER TRANSFORMER

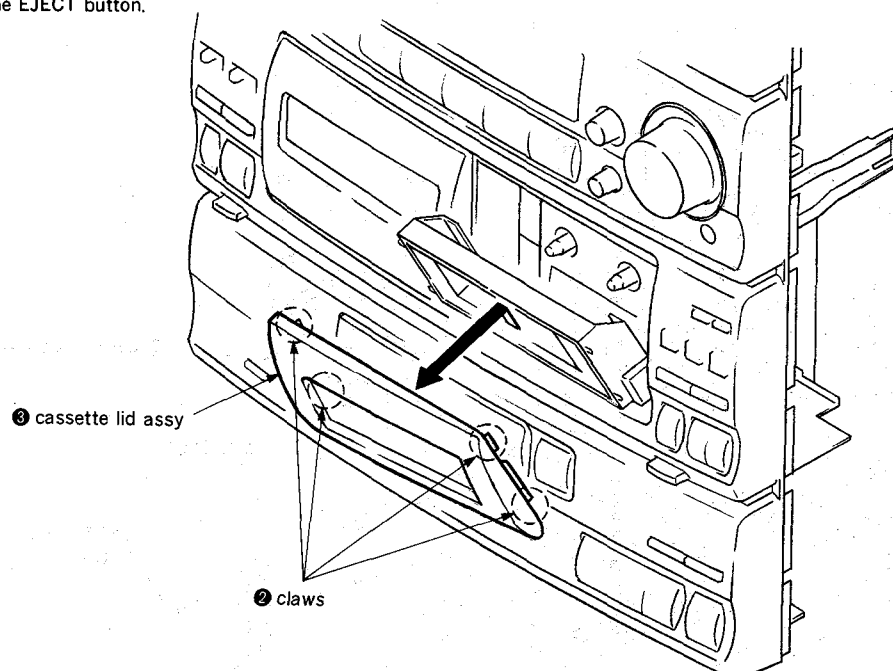


2-5. CHASSIS



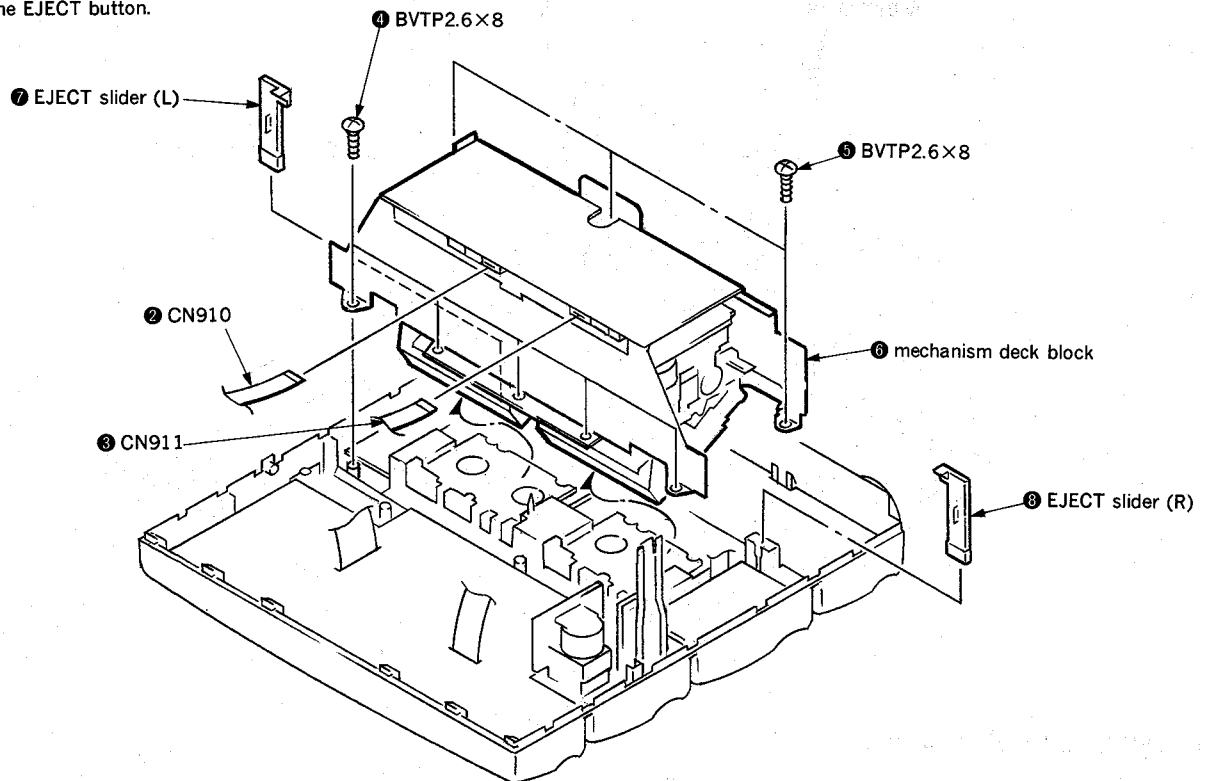
2-6. CASSETTE LID ASSY

① Push the EJECT button.

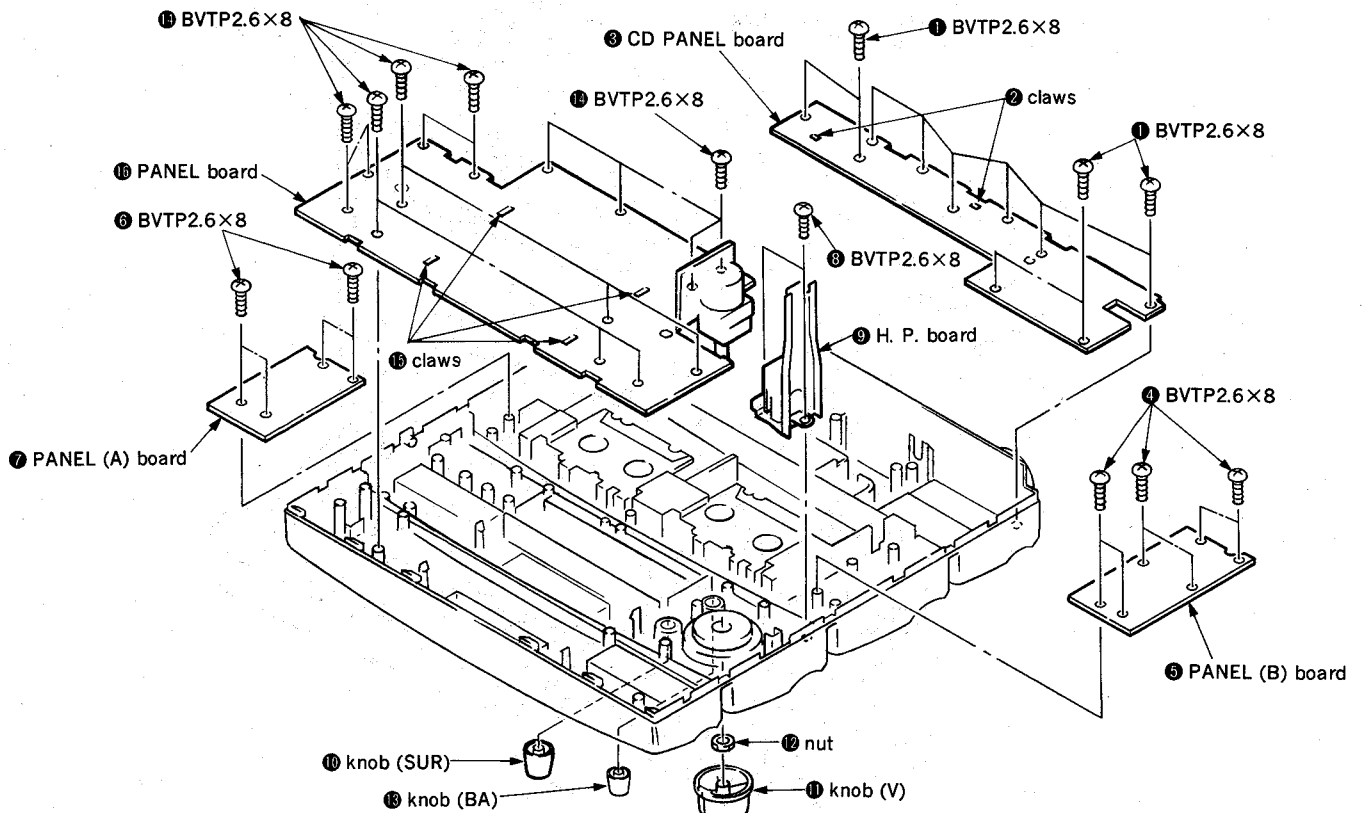


2-7. MECHANISM DECK BLOCK

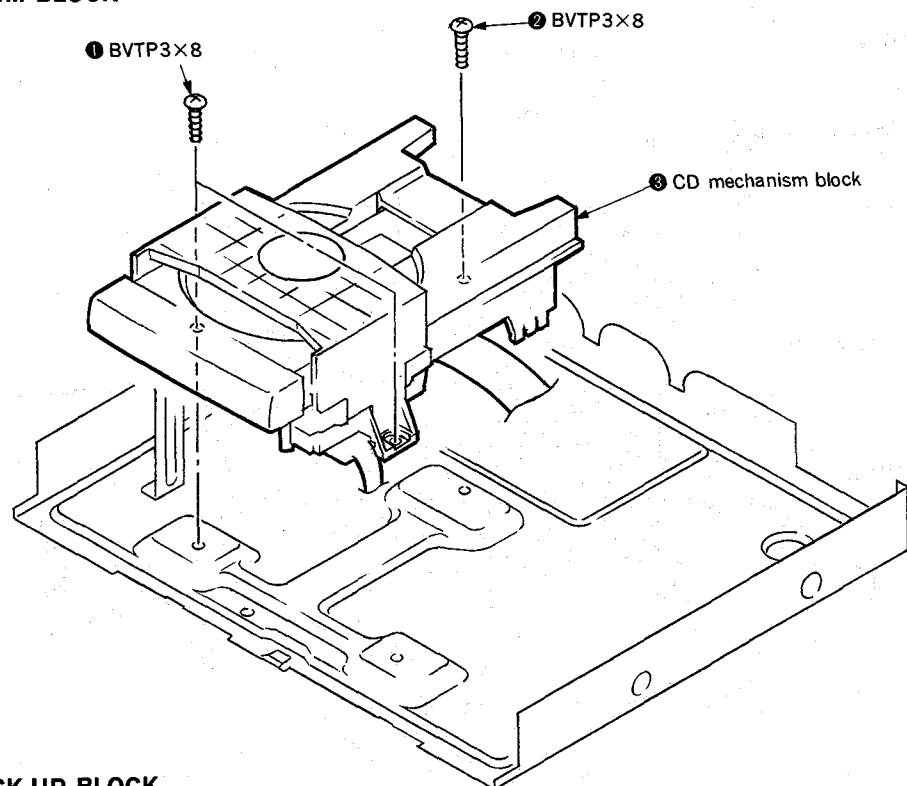
① Push the EJECT button.



2-8. PANEL BOARD

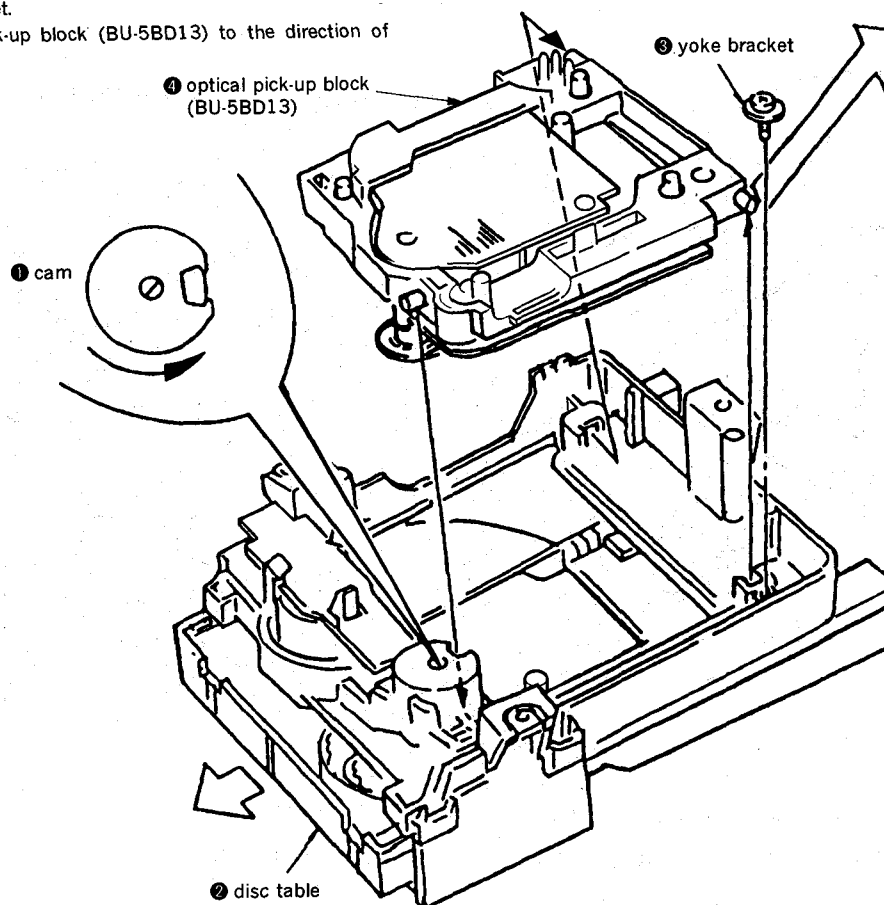


2-9. CD MECHANISM BLOCK



2-10. OPTICAL PICK-UP BLOCK

- ① Turn the cam to the direction of arrow (Counter clock wise) by minus screw driver.
- ② Take off the disc table.
- ③ Remove the yoke bracket.
- ④ Remove the optical pick-up block (BU-5BD13) to the direction of arrow.



SECTION 3 MECHANICAL ADJUSTMENTS

PRECAUTION

- Clean the following parts with a denatured alcohol-moistened swab :
 - record/playback/erase head
 - pinch roller
 - rubber belts
 - idlers
 - capstan
- Demagnetize the record/playback head with a head demagnetizer.
(Head demagnetizer do not approach for the erase head.)
- Do not use a magnetized screwdriver for the adjustment.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Torque	Torque meter	Meter reading
Forward	CQ-102C	35 to 60g·cm (0.49 to 0.83 oz·inch)
Forward back tension	CQ-102C	2 to 6g·cm (0.028 to 0.083 oz·inch)
Reverse	CQ-102RC	35 to 60g·cm (0.49 to 0.83 oz·inch)
Reverse back tension	CQ-102RC	2 to 6g·cm (0.028 to 0.083 oz·inch)
Forward, Reverse	CQ-201B	70 to 110g·cm (0.97 to 1.53 oz·inch)

SECTION 4 ELECTRICAL ADJUSTMENTS

DECK SECTION

0dB=0.775V

PRECAUTION

- The adjustment should be performed in the publication.
(Be sure to make playback adjustment at first.)
- The adjustment and measurement should be performed for both L-CH and R-CH.
 - Switch position
 - DOLBY NR switch : OFF
 - DIRECTION MODE switch : $\rightleftharpoons$
- Prior to electrical adjustments, short the connector CN904 (TEST) on the MAIN TC board.
After adjustments, open the connector CN904.

Test Tape

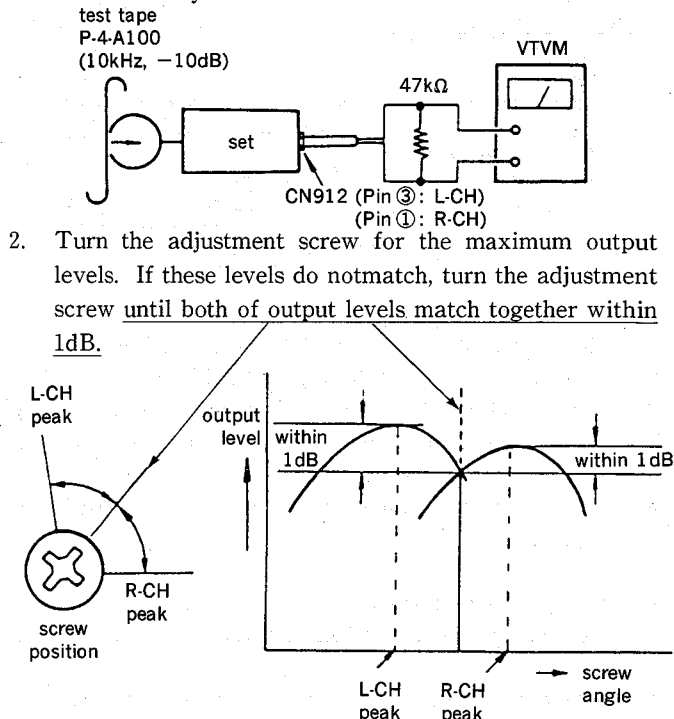
Tape	Contents	Use
P-4-A100	10kHz, -10dB	Azimuth Adjustment
P-4-L300	315Hz, 0dB	Level Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment

Record/Playback Head Azimuth Adjustment

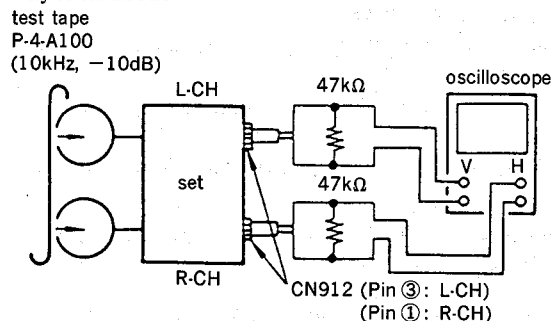
DECK A DECK B

Procedure :

- Forward Playback Mode

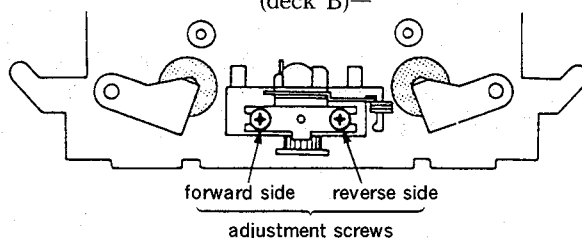


- Playback Mode



- Change the reverse playback mode and repeat the steps 1 to 3.
- After the adjustment, lock the adjustment screws with suitable locking compound.

Adjustment Location : —playback head (deck A)—
—record/playback/erase head (deck B)—

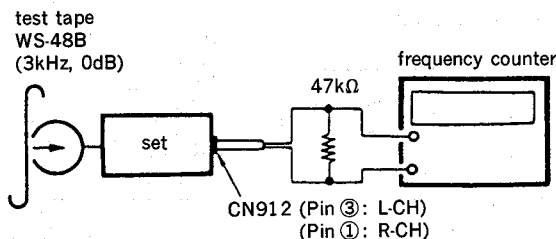


Tape Speed Adjustment DECK A DECK B

Perform high speed adjustment before normal speed adjustment.

Procedure :

—Forward Playback Mode—



(high speed adjustment)

1. Short the connector CN904 (pins ① and ②). (test mode)
2. Keep on pressing the DUBBING SPEED HIGH switch.
3. Adjust each RV72 so that the frequency counter reading becomes within adjustment limits of $6,000 \pm 30\text{Hz}$ on both of deck A and deck B.
4. Change the reverse playback mode and repeat the steps 2 and 3.

(normal speed adjustment)

5. Keep on pressing the DUBBING SPEED NORMAL switch.
6. Adjust each RV71 so that the frequency counter reading becomes within adjustment limits of $3,000 \pm 15\text{Hz}$ on both of deck A and deck B.
7. Change the reverse playback mode and repeat the steps 5 and 6.
8. After adjustment, open the connector CN904.

Frequency difference between the beginning and the end of the tape should be within $\pm 3\%$.

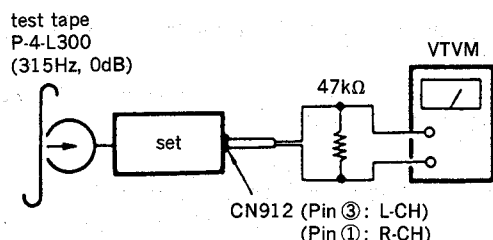
Frequency difference between deck A and deck B the beginning of the tape should be within $\pm 1\%$.

Adjustment Location : audio (MD-AXM) board (deck A)
audio (MD-ICD) board (deck B)

Playback Level Adjustment DECK A DECK B

Procedure :

—Forward Playback Mode—



Adjust each RV11 (L-CH) and RV21 (R-CH) so that the VTVM reading becomes within adjustment limits below on both of deck A and deck B.

Adjustment Limits :

LINE OUT level : $-7.5 \pm 0.5\text{dB}$ (0.309 to 0.346V)

Level difference between channels : within 0.5dB

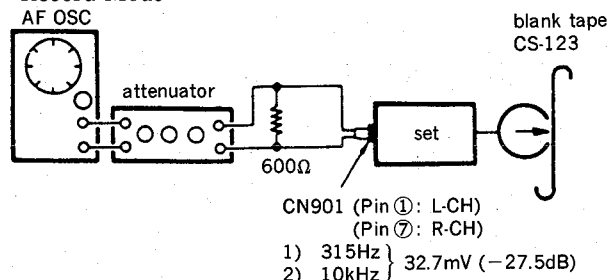
Confirm the DOLBY OUT level does not change in playback mode while changing the mode from playback to stop several times.

Adjustment Location : audio (MD-AXM) board (deck A)
audio (MD-ICD) board (deck B)

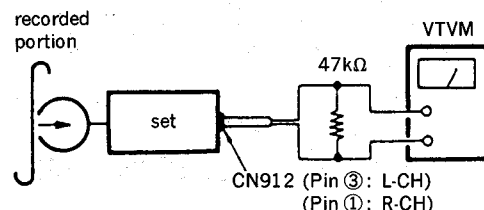
Record Bias Adjustment DECK B

Procedure :

1. Record Mode



2. Playback Mode



3. Playback the signal recorded in step 1, and confirm that the 10kHz playback output level is VTVM reading becomes within adjustment limits below relative to the 315Hz output.
4. If the adjustment limits are not satisfied, adjust each RV12 (L-CH) and RV22 (R-CH) so that the VTVM reading becomes within adjustment limits below.

Adjustment Limits :

10kHz playback output

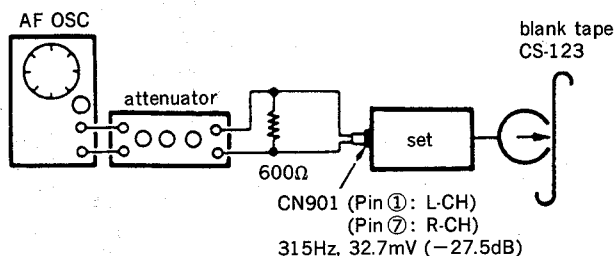
relative to the 315Hz output : $0 \pm 0.5\text{dB}$

(0.732 to 0.821V)

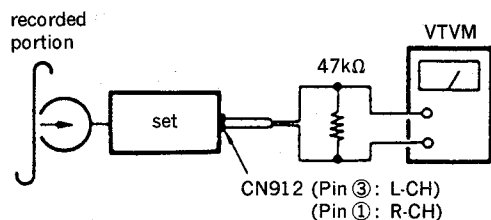
Adjustment Location : audio (MD-ICD) board (deck B)

Procedure :

- ## 1. Record Mode



- ## 2. Playback Mode



3. Playback the signal recorded in step 1, and confirm that the playback output level is VTVM reading becomes within adjustment limits below.
4. If the adjustment limits are not satisfied, adjust each RV701 (L-CH) and RV801 (R-CH) so that the VTVM reading becomes within adjustment limits below.

Adjustment Limits :

315Hz playback output level: $-27.5 \pm 0.5\text{dB}$ (30.9 to 34.6mV)

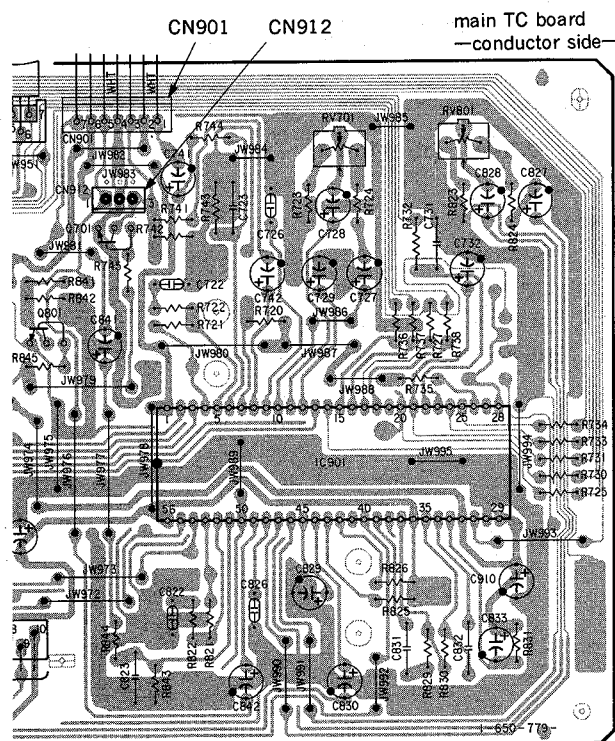
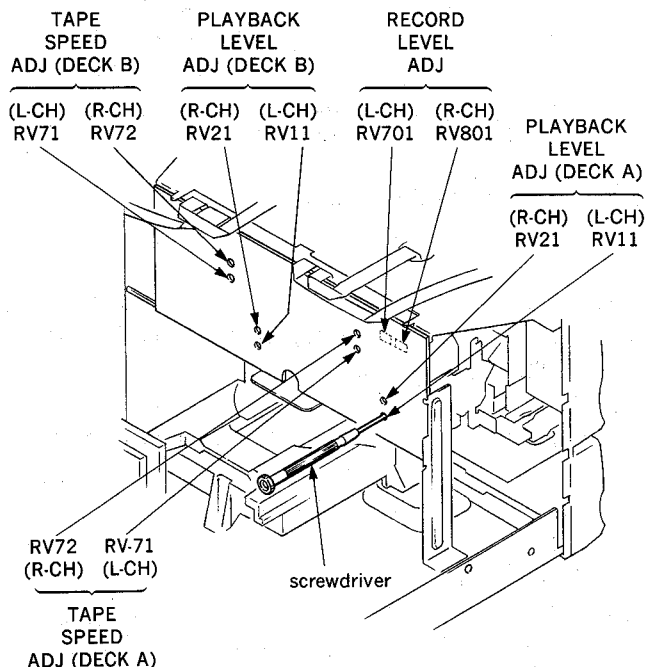
Adjustment Location : main TC board

Adjustment Location :

Screwdriver to adjust the MD block

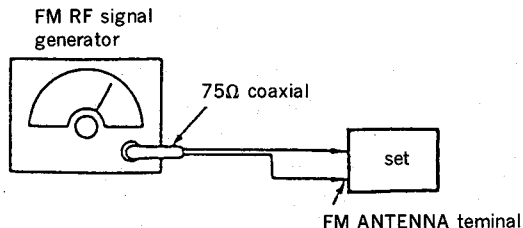


The MD block adjustment can be performed by inserting a screwdriver of which axis length (not including the shaft) is 35mm or more through the rear side of the main TC board.



TUNER SECTION**0dB = 1 μ V****• FM SECTION**

Setting :



Carrier frequency : 98MHz
 Modulation : 1kHz, 40kHz deviation

FM Tuned Level Adjustment

Band : FM

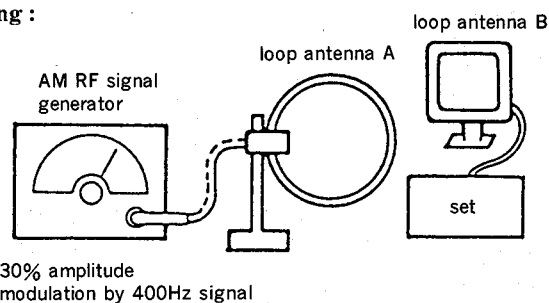
Procedure :

1. Supply a 31.6 μ V (30dB μ) 98MHz signal from the ANTENNA terminal.
2. Tune the set to 98MHz.
3. Adjust RV2 so that the TUNED indicator goes on.

Adjustment Location : main board

• MW SECTION

Setting :

**MW Tuned Level Adjustment**

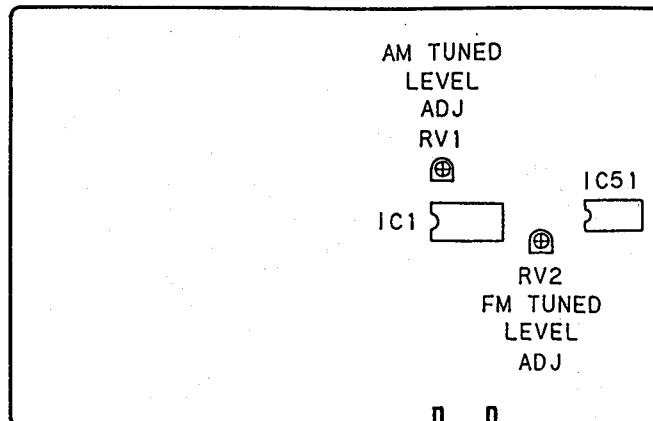
Band : MW

Procedure :

1. Set loop antenna A so that the loop antenna B input level becomes 2.512mV (68dB μ).
2. Tune the set to 999kHz.
3. Adjust RV1 so that the TUNED indicator goes on.

Adjustment Location : main board

Adjustment Location : main board (component side)

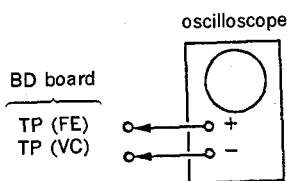


CD SECTION

Note :

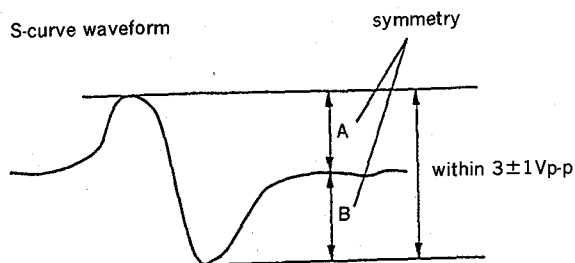
1. CD Block basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use the oscilloscope with more than 10MΩ impedance.
4. Clean an objective lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S-Curve Check



Procedure :

1. Connect oscilloscope to test point TP (FE) on BD board.
2. Connect between test point TP (FEI) and TP (VC) by lead wire.
3. Turned Power switch on.
4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (Actuate the focus search when disc table is moving in and out.)
5. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within $3 \pm 1V_{p-p}$.

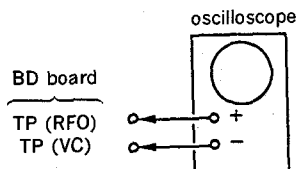


6. After check, remove the lead wire connected in step 2.

Note :

- Try to measure several times to make sure that the ratio of A : B or B : A is more than 10 : 7.
- Take sweep time as long as possible and light up the brightness to obtain best waveform.

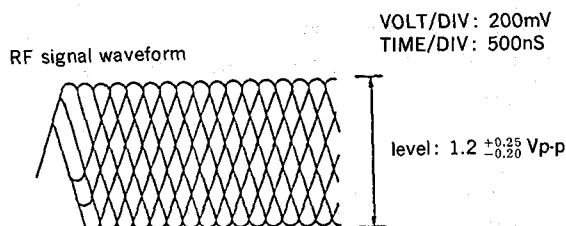
RF Level Check



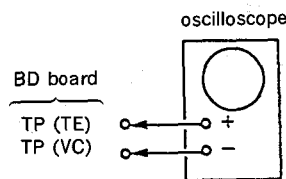
Procedure :

1. Connect oscilloscope to test point TP (RFO) on BD board.
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note : Clear RF signal waveform means that the shape "◇" can be clearly distinguished at the center of the waveform.

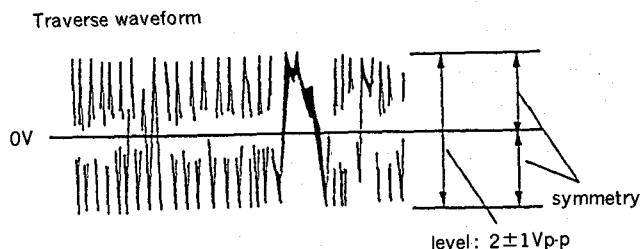


E-F Balance Check



Procedure :

1. Connect test point TP (ADJ) to ground and TP (TEI) to TP (VC) with lead wire.
2. Connect oscilloscope to test point TP (TE) on BD board.
3. Turned Power switch on.
4. Put disc (YEDS-18) in and playback.
5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0V, and check this level.

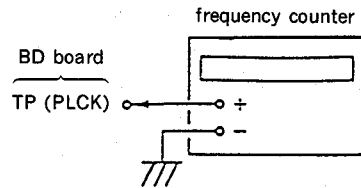


6. Remove the lead wire connected in step 1.

RF PLL Free-run Frequency Check

Procedure :

1. Connect frequency counter to test point (PLCK) with lead wire.

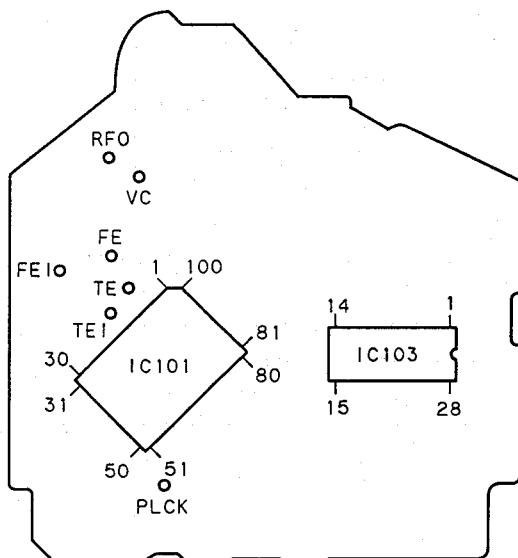


2. Turned Power switch on.
3. Confirm that reading on frequency counter is 4.3218MHz.

Adjustment Location :

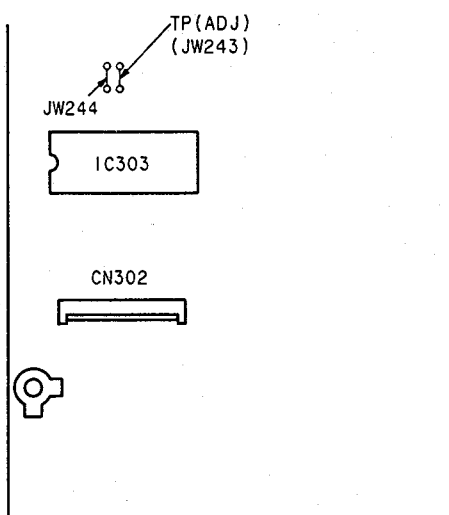
[BD BOARD]

—Side B—



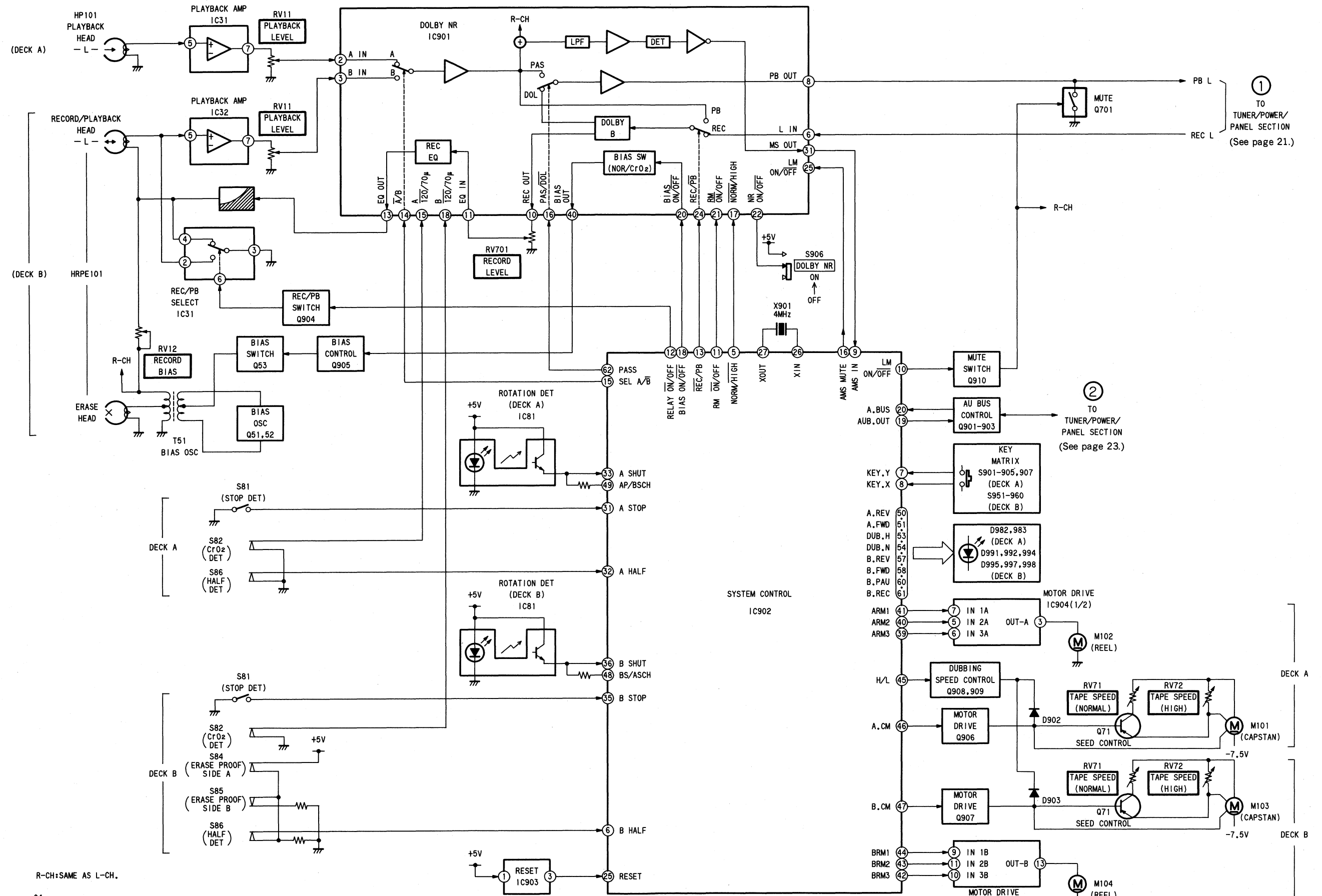
[MAIN BOARD]

—Component side—

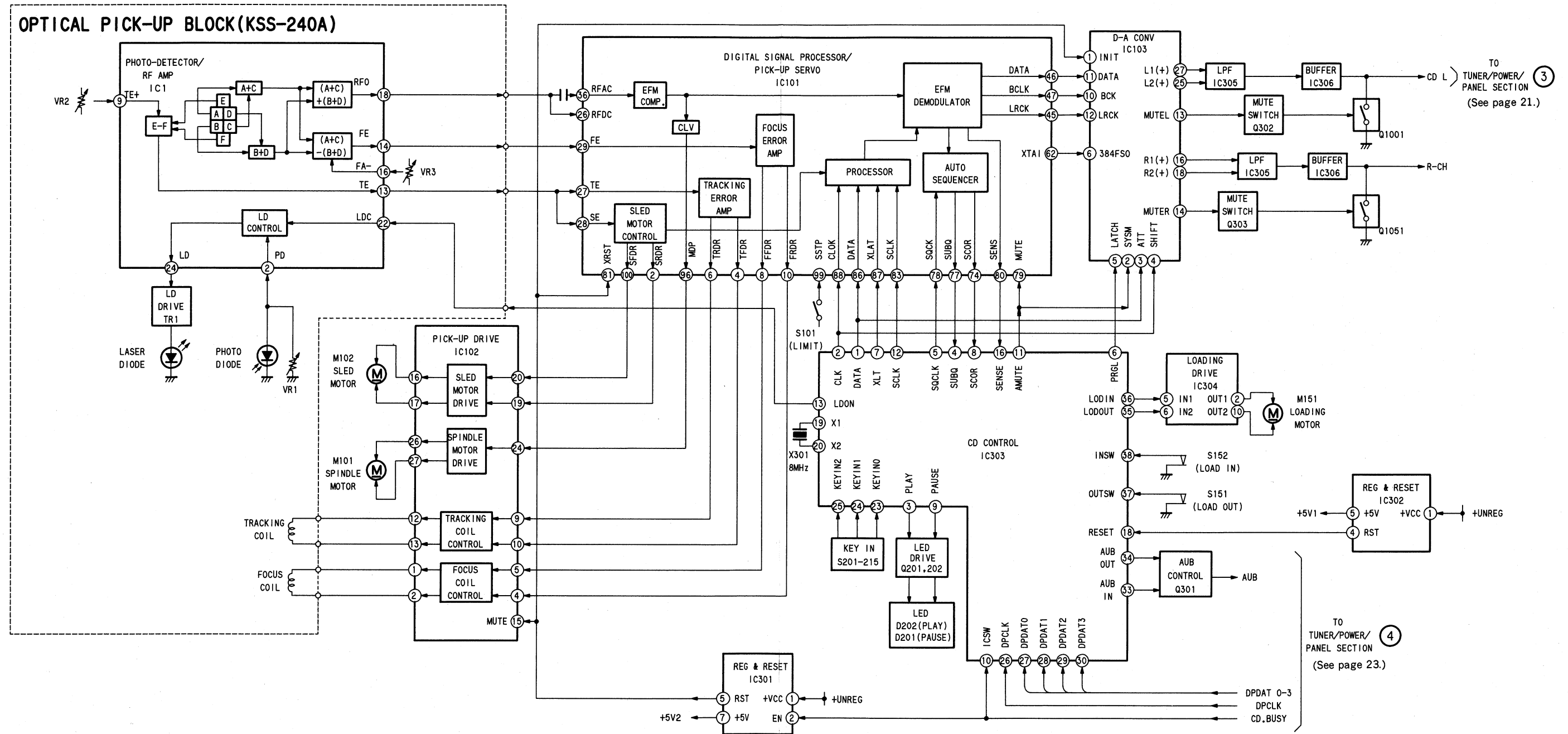


SECTION 5 DIAGRAMS

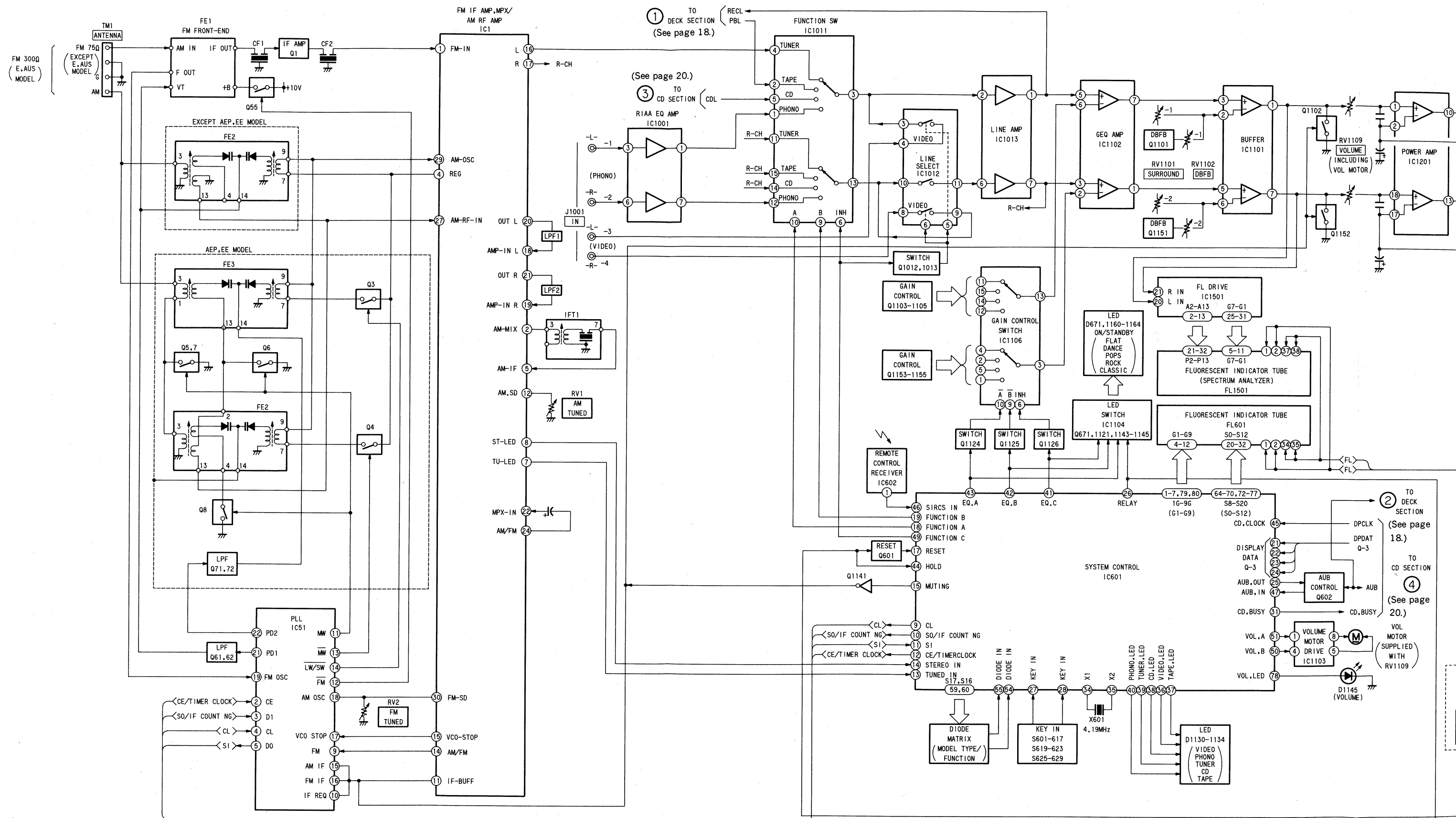
5-1. BLOCK DIAGRAM—DECK SECTION—



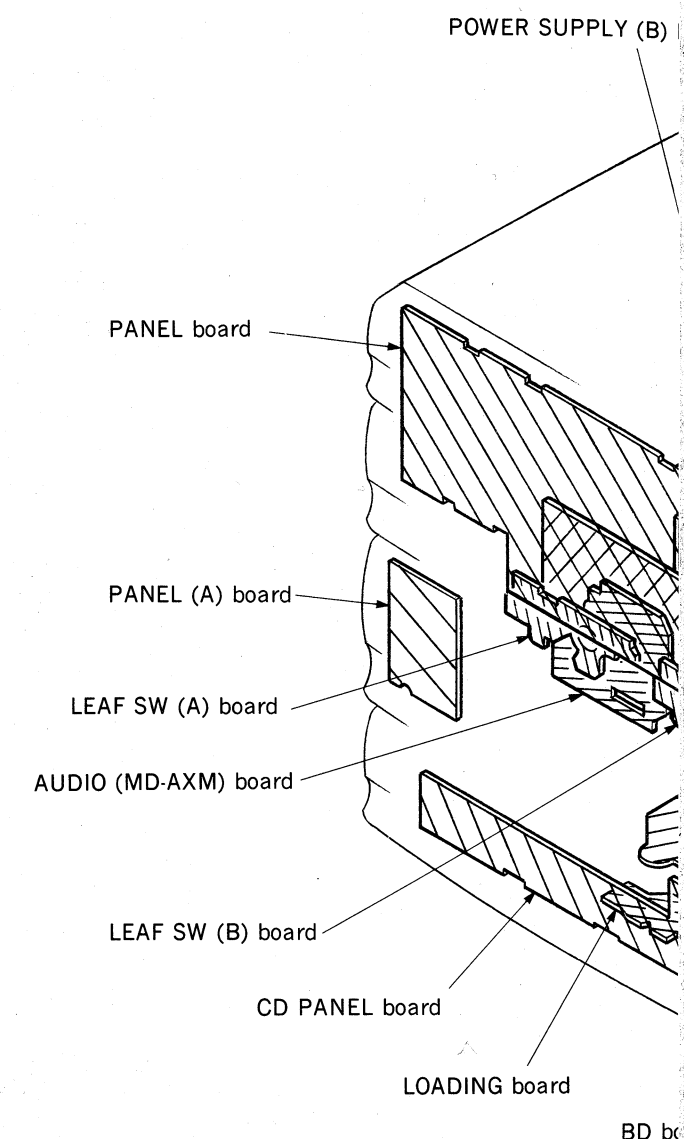
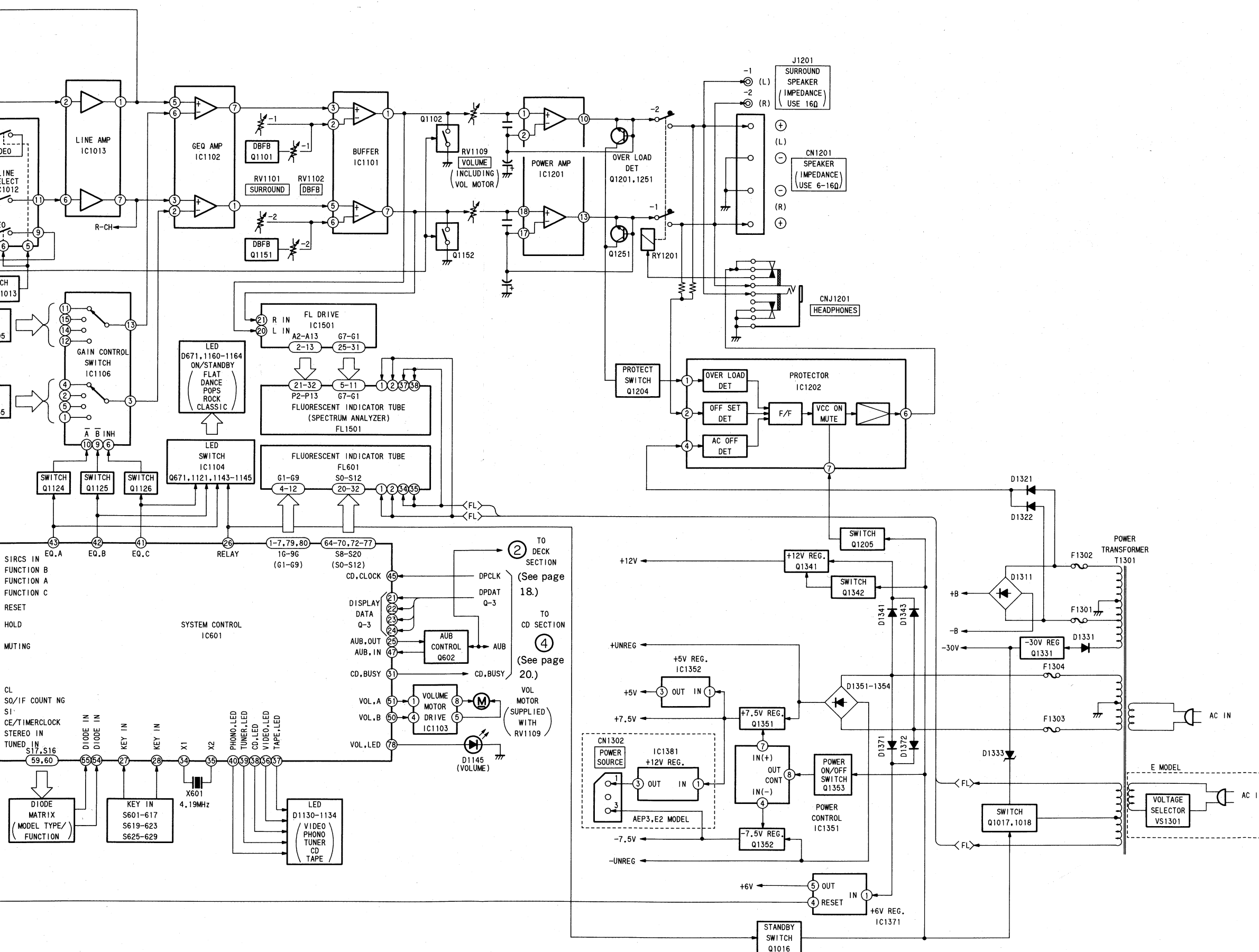
5-2. BLOCK DIAGRAM—CD SECTION—



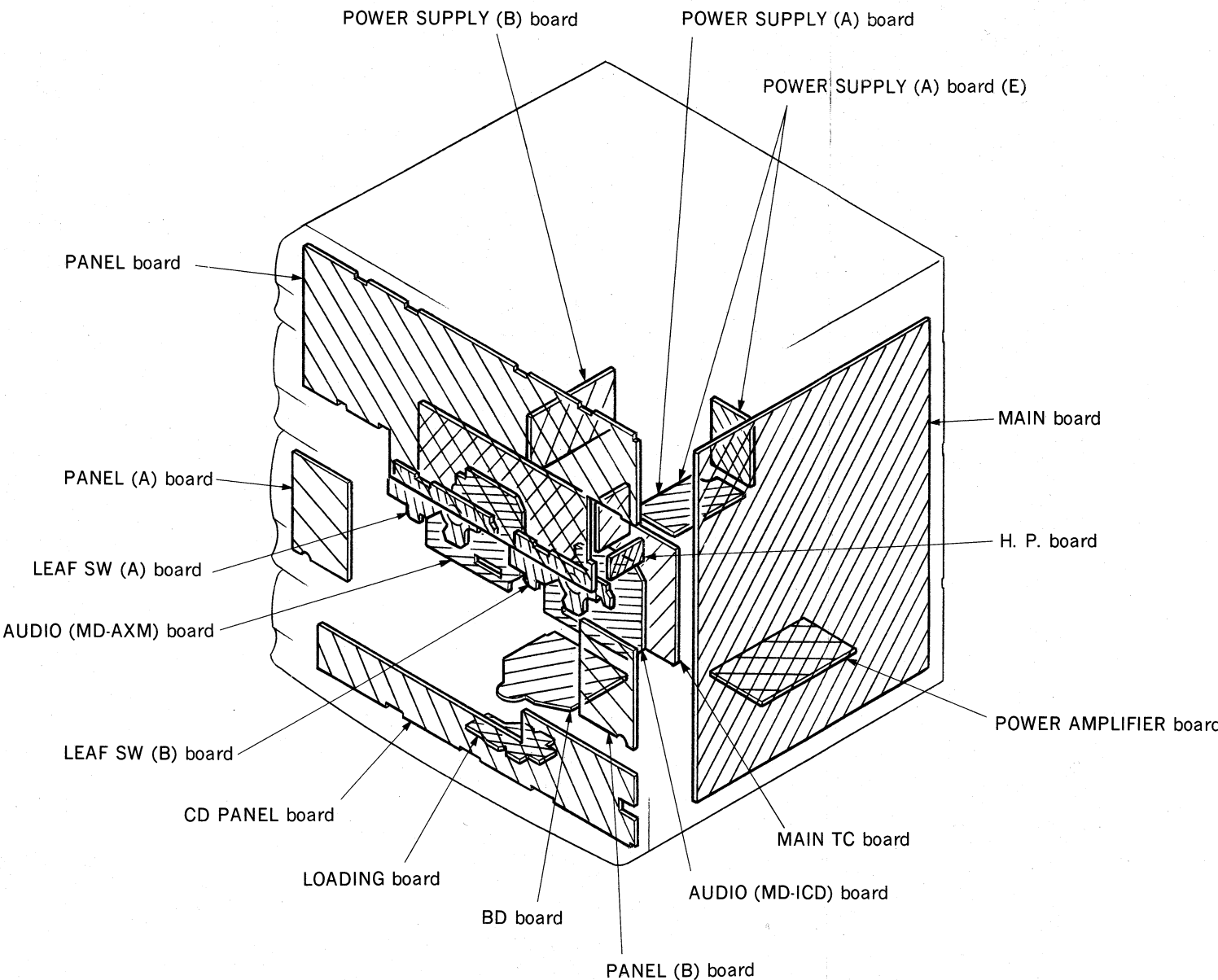
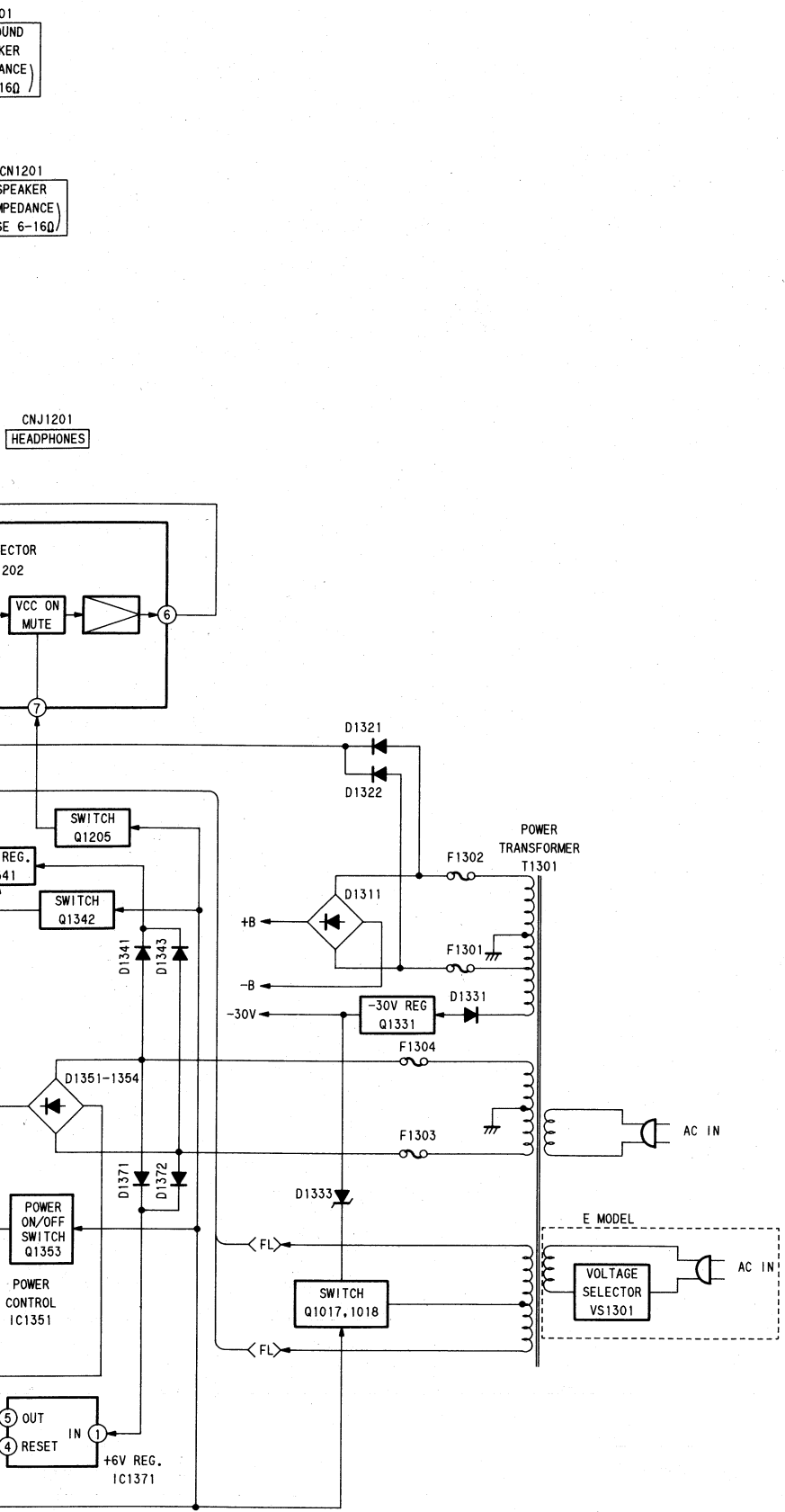
5-3. BLOCK DIAGRAM—TUNER/POWER/PANEL SECTION—



5-4. CIRCUIT BOARDS LOCATION



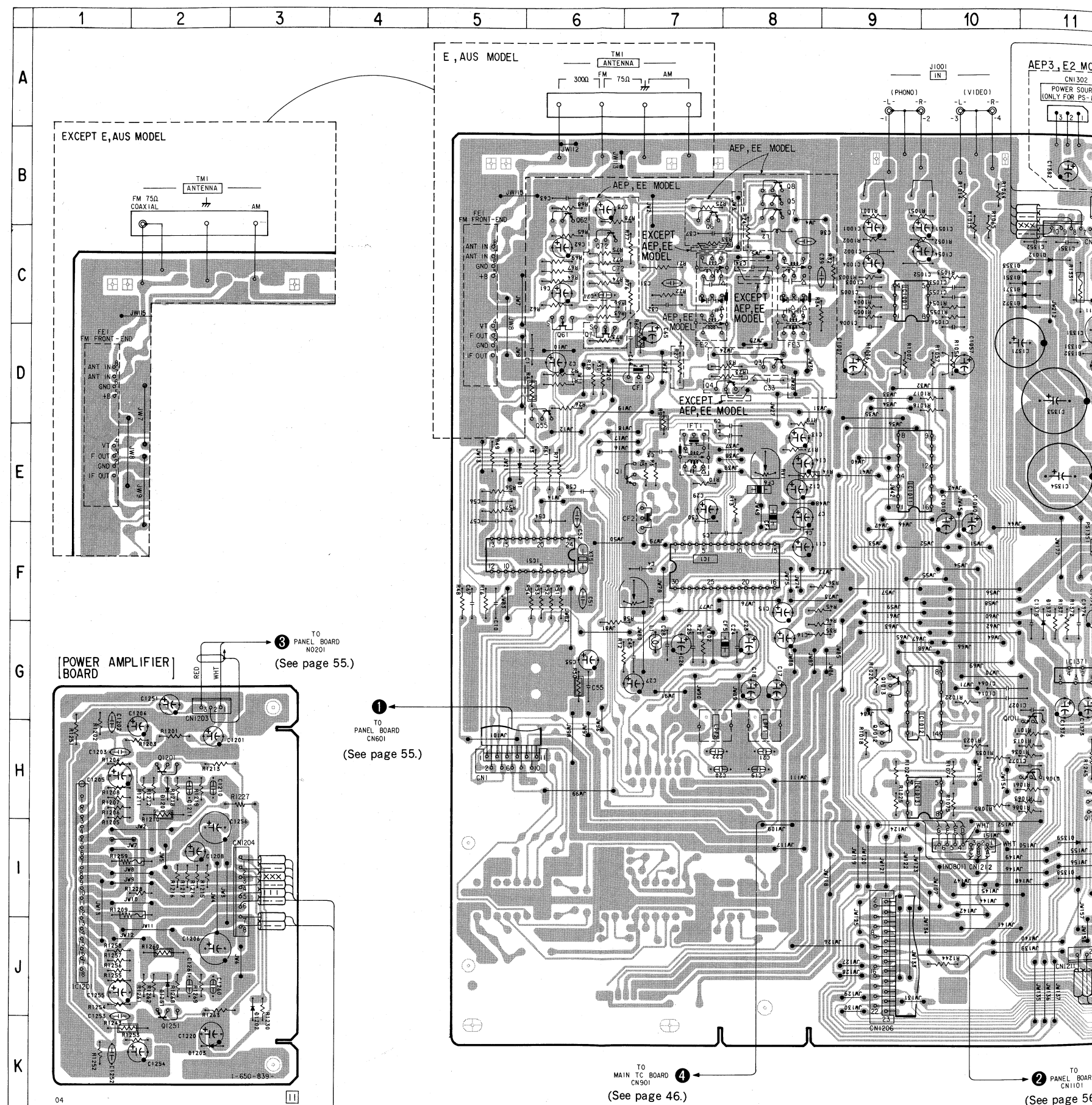
5-4. CIRCUIT BOARDS LOCATION

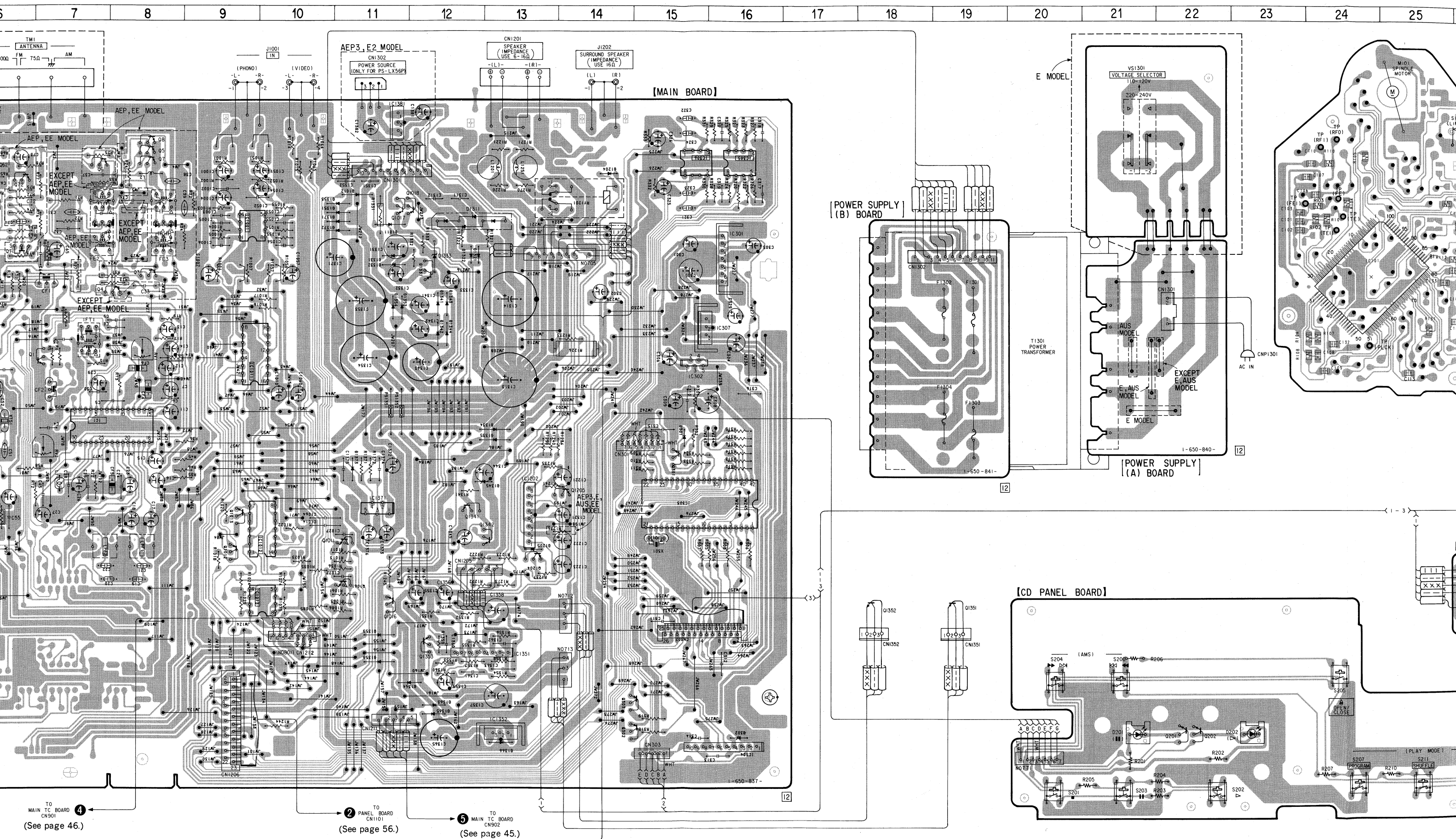


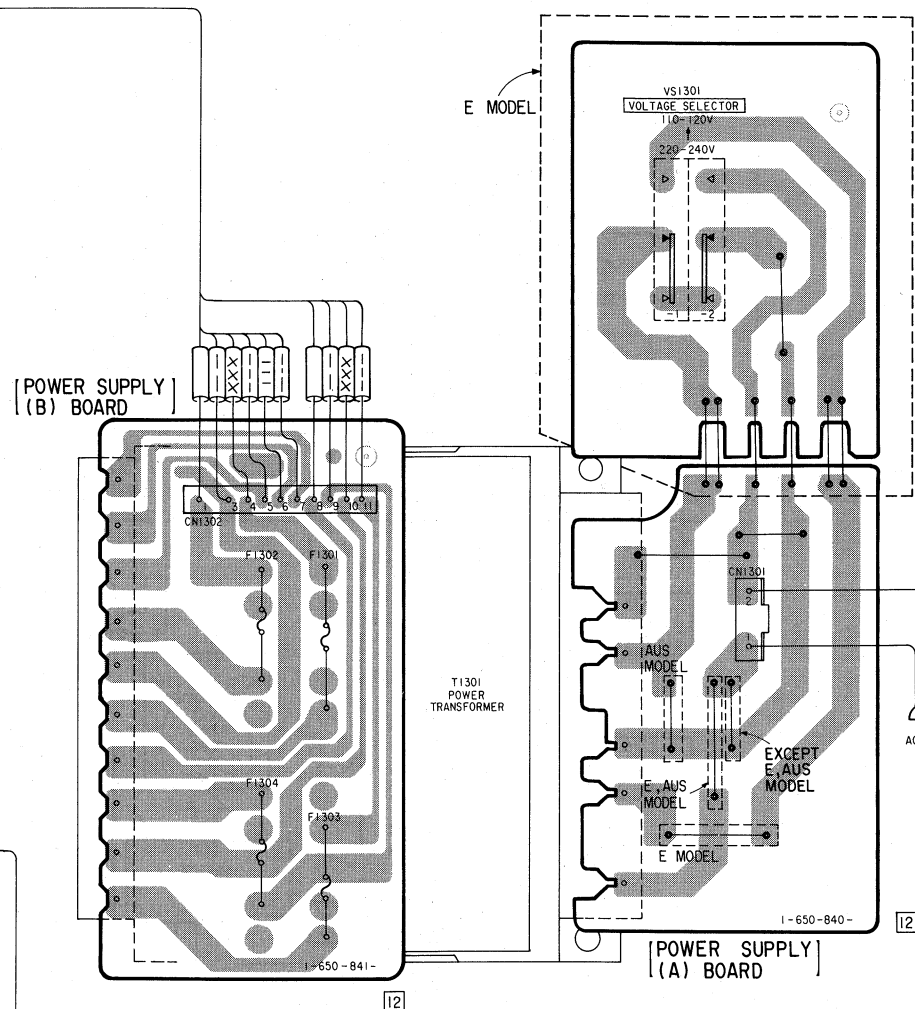
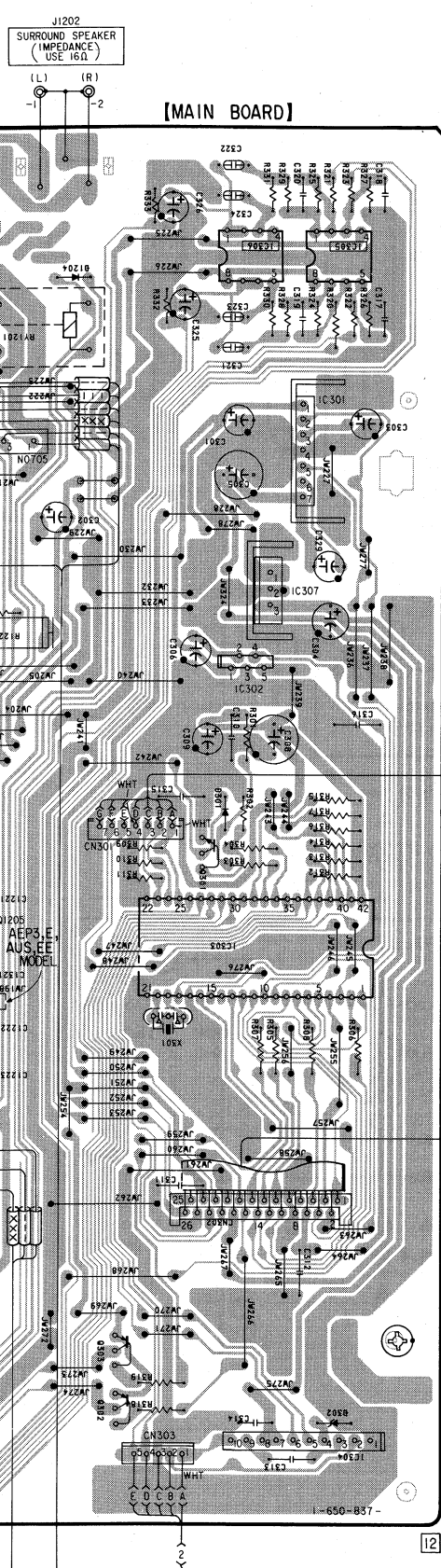
	1	2	3	4	5	6	7	8	9	10	11
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Ref. No.	Location	Ref. No.	Location
D1	E-5	IC305	B-16
D201	J-21	IC306	B-15
D202	J-23	IC307	E-16
D301	F-15	IC1001	C-9
D302	J-16	IC1011	E-9
D1011	C-11	IC1012	G-9
D1012	C-11	IC1013	H-9
D1201	H-2	IC1201	J-1
D1202	J-3	IC1202	G-13
D1203	K-2	IC1351	I-13
D1204	C-14	IC1352	J-13
D1205	H-13	IC1371	G-11
D1251	J-2	IC1381	B-11
D1311	C-11		
D1321	D-11	Q1	E-7
D1322	D-11	Q2	E-7
D1331	D-11	Q3	D-8
D1332	D-11	Q4	D-7
D1333	D-12	Q5	B-8
D1334	F-13	Q6	B-7
D1335	F-13	Q7	B-8
D1341	D-12	Q8	B-8
D1342	E-12	Q55	D-6
D1343	D-12	Q61	D-6
D1344	E-12	Q62	B-6
D1345	G-12	Q71	D-6
D1351	C-10	Q72	C-6
D1352	D-11	Q201	J-22
D1353	C-10	Q202	J-22
D1354	D-11	Q301	F-15
D1358	I-11	Q302	J-14
D1359	I-11	Q303	J-14
D1363	J-12	Q1011	G-11
D1364	I-11	Q1012	H-9
D1365	J-12	Q1013	G-9
D1366	J-13	Q1016	H-11
D1371	C-10	Q1017	C-11
D1372	C-10	Q1018	C-11
D1373	F-11	Q1061	H-11
		Q1201	H-2
IC1	F-7	Q1204	H-13
IC51	F-6	Q1205	G-14
IC101	D-24	Q1251	J-2
IC102	C-30	Q1331	D-12
IC103	D-26	Q1341	G-12
IC301	C-16	Q1342	G-12
IC302	E-15	Q1351	H-19
IC303	G-15	Q1352	H-18
IC304	J-16	Q1353	I-12

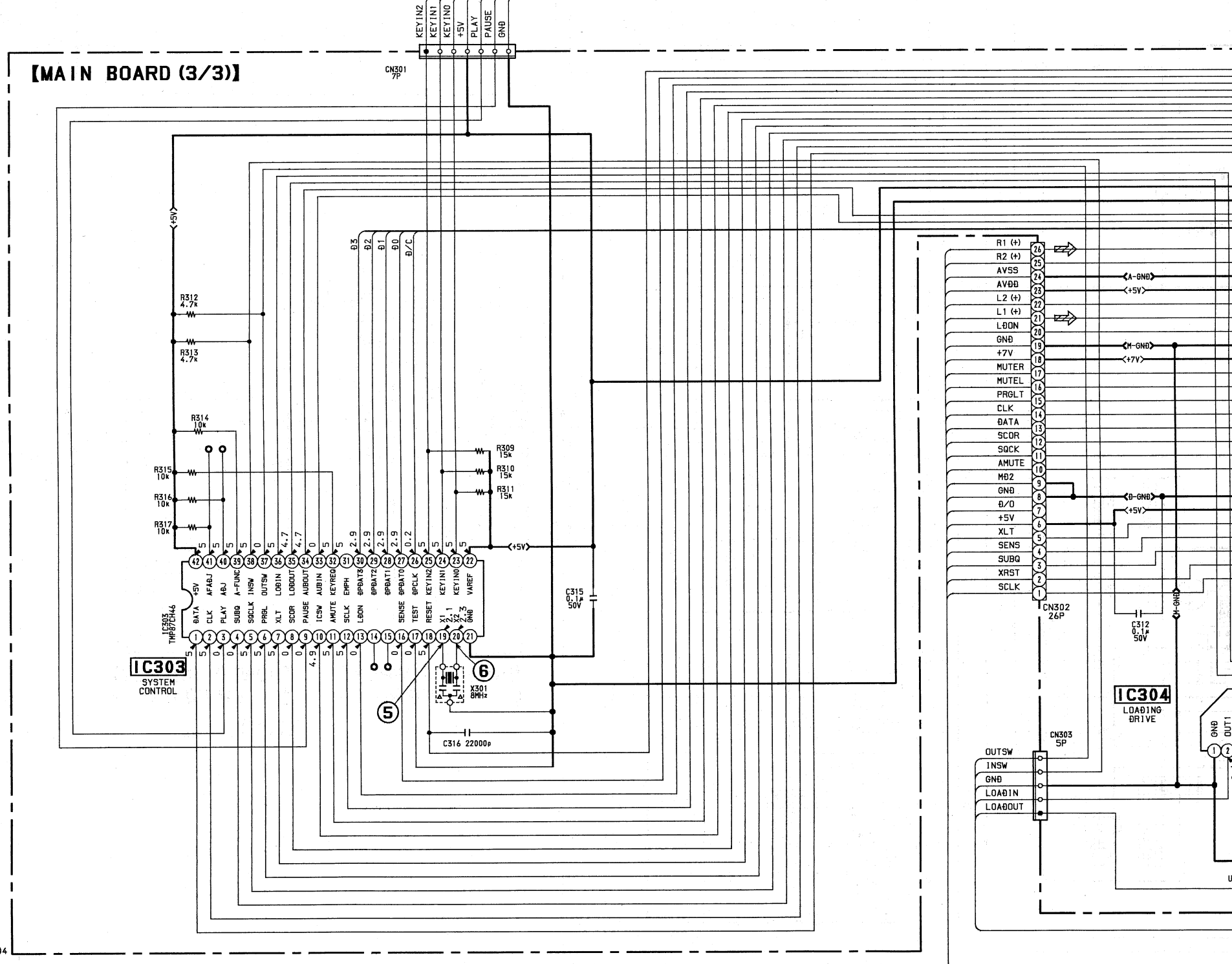
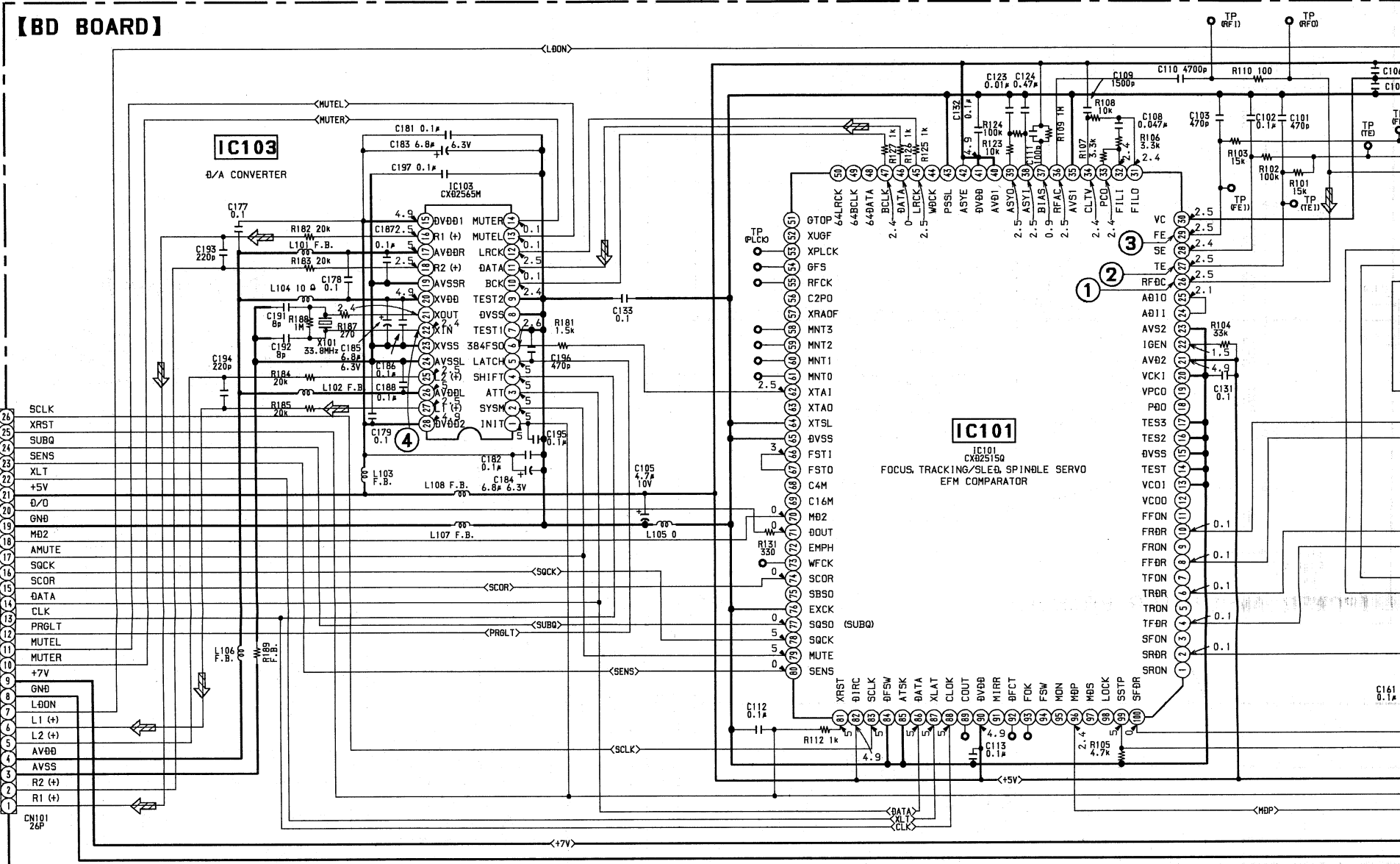
- ○ : parts extracted from the component side.
- ● : Through hole.
- □ → indicates side identified with part number.
- ■ : Pattern on the side which is seen.
(The other layer's patterns are not indicated.)
- Abbreviations
 - EE : East European model
 - AUS : Australian model
 - AEP3 : AEP unit with PHONO SOURCE
(Made in Indonesia)
 - E2 : AC 120V Area model

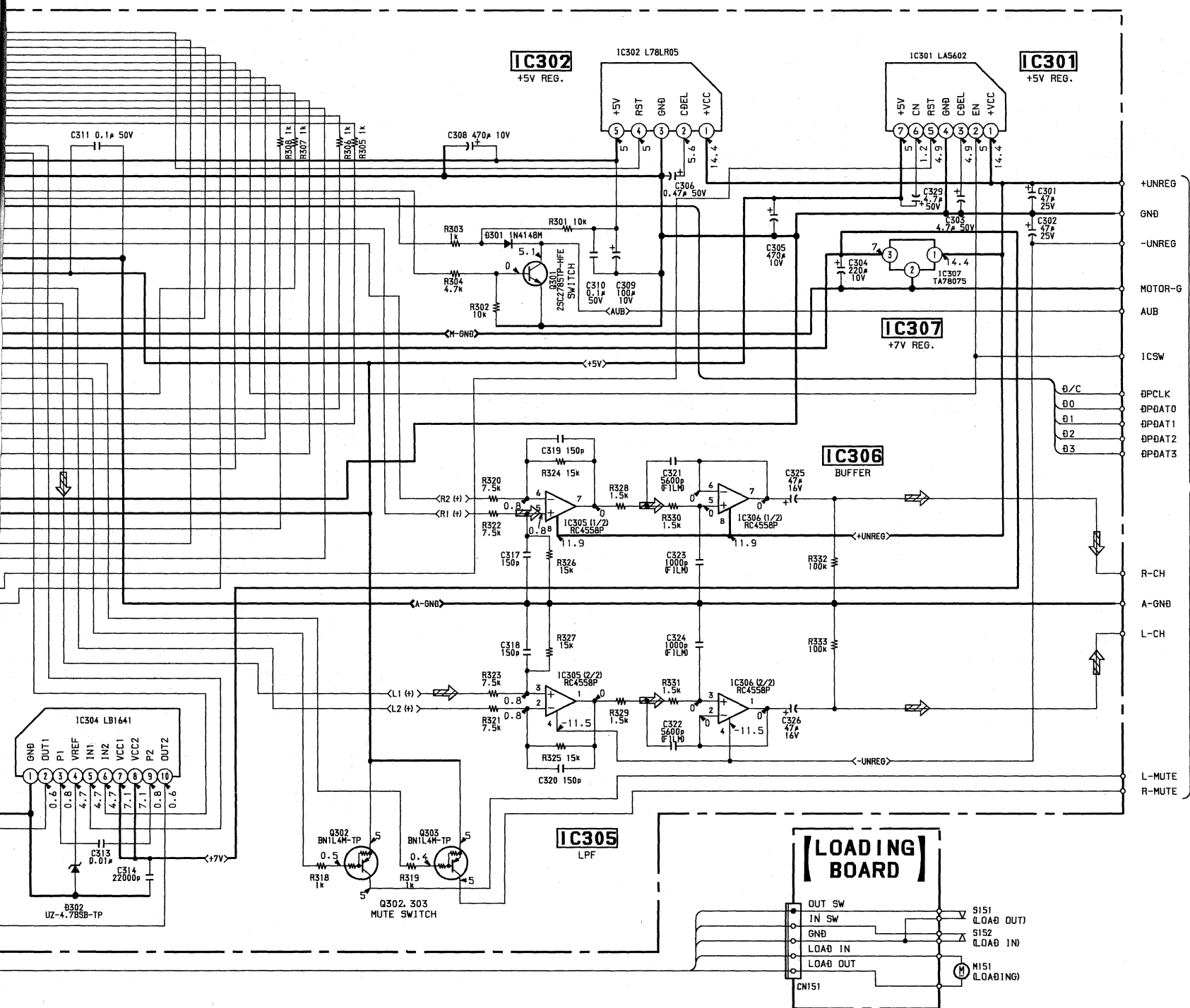
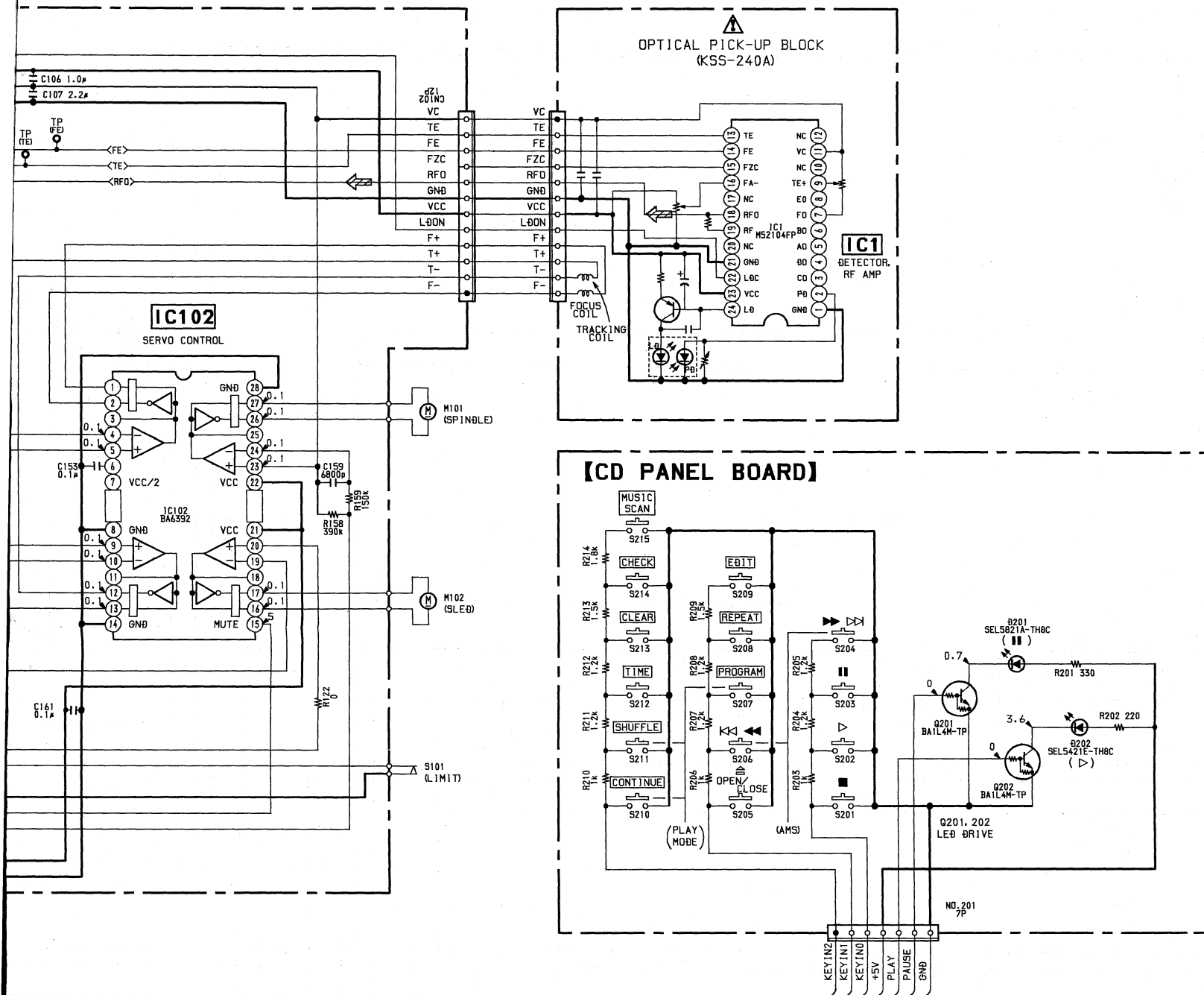




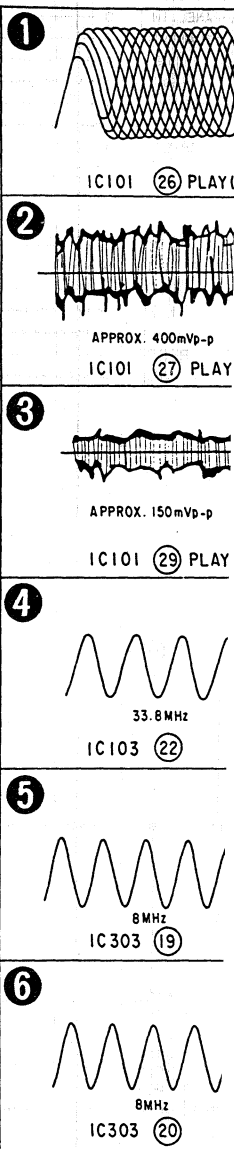


1	2	3	4	5	6	7	8	9	10	11	12
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Waveforms



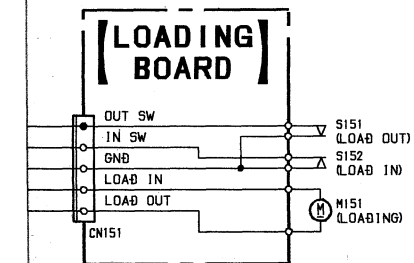
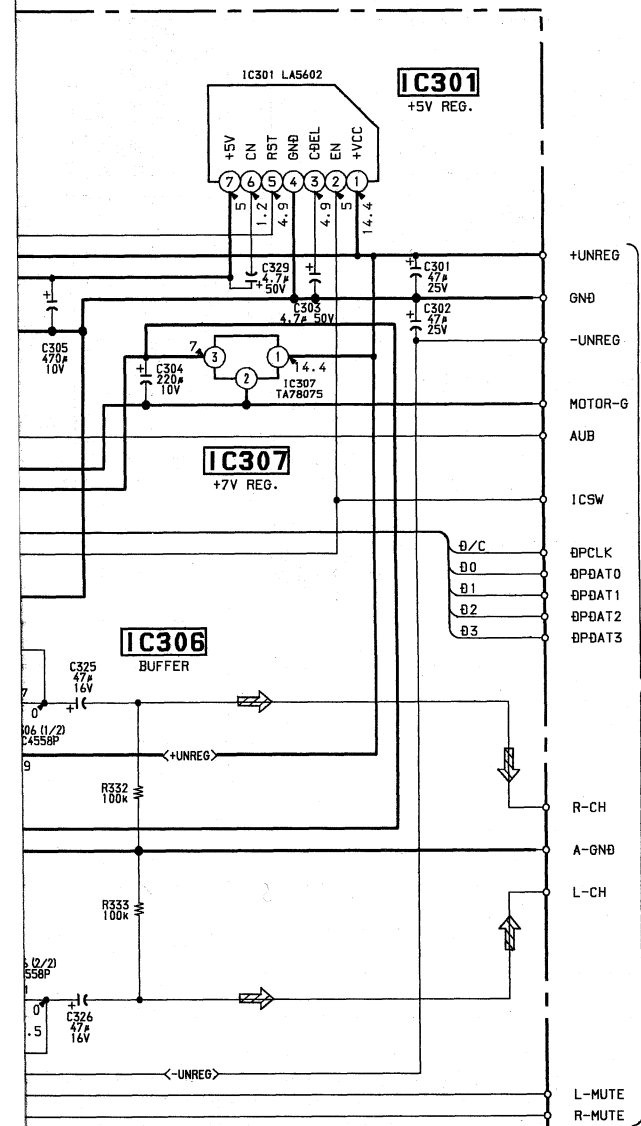
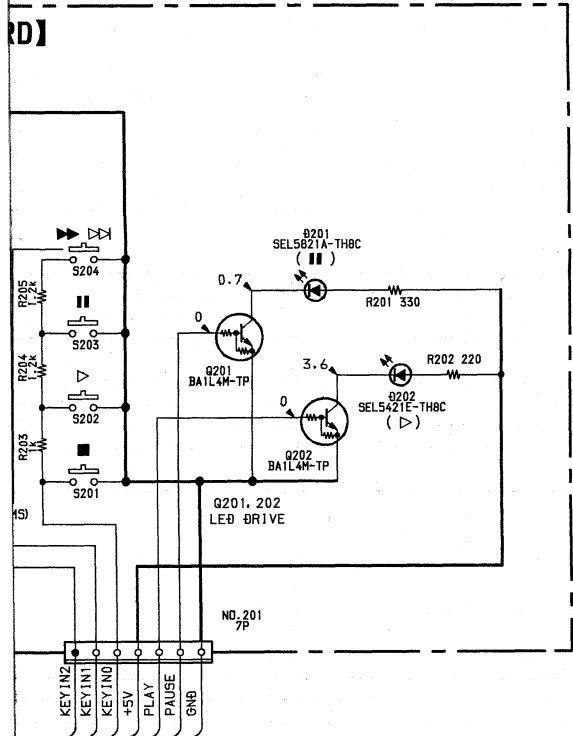
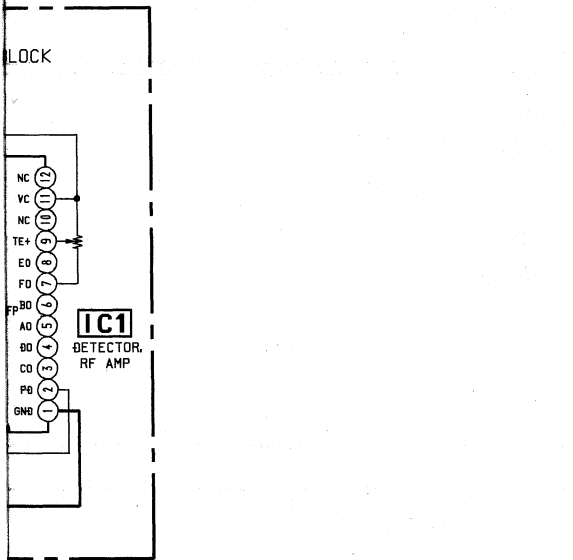
Note:

- All capacitors are in μ or less are not indicated.
- All resistors are in Ω specified.
- Δ : internal comp.

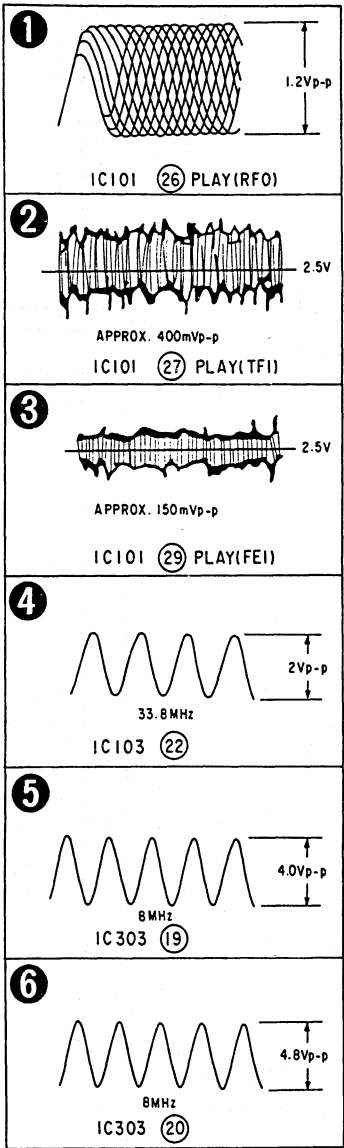
Note: The component with mark Δ Replace only with

- : B+ Line
- Voltage and waveform no-signal conditions.
- no mark: CD STOP
- Voltages are taken Voltage variations r tolerances.
- Waveforms are take Voltage variations r tolerances.
- Circled numbers refer
- Signal path.
- Δ : CD

18 19 20 21 22



Waveforms

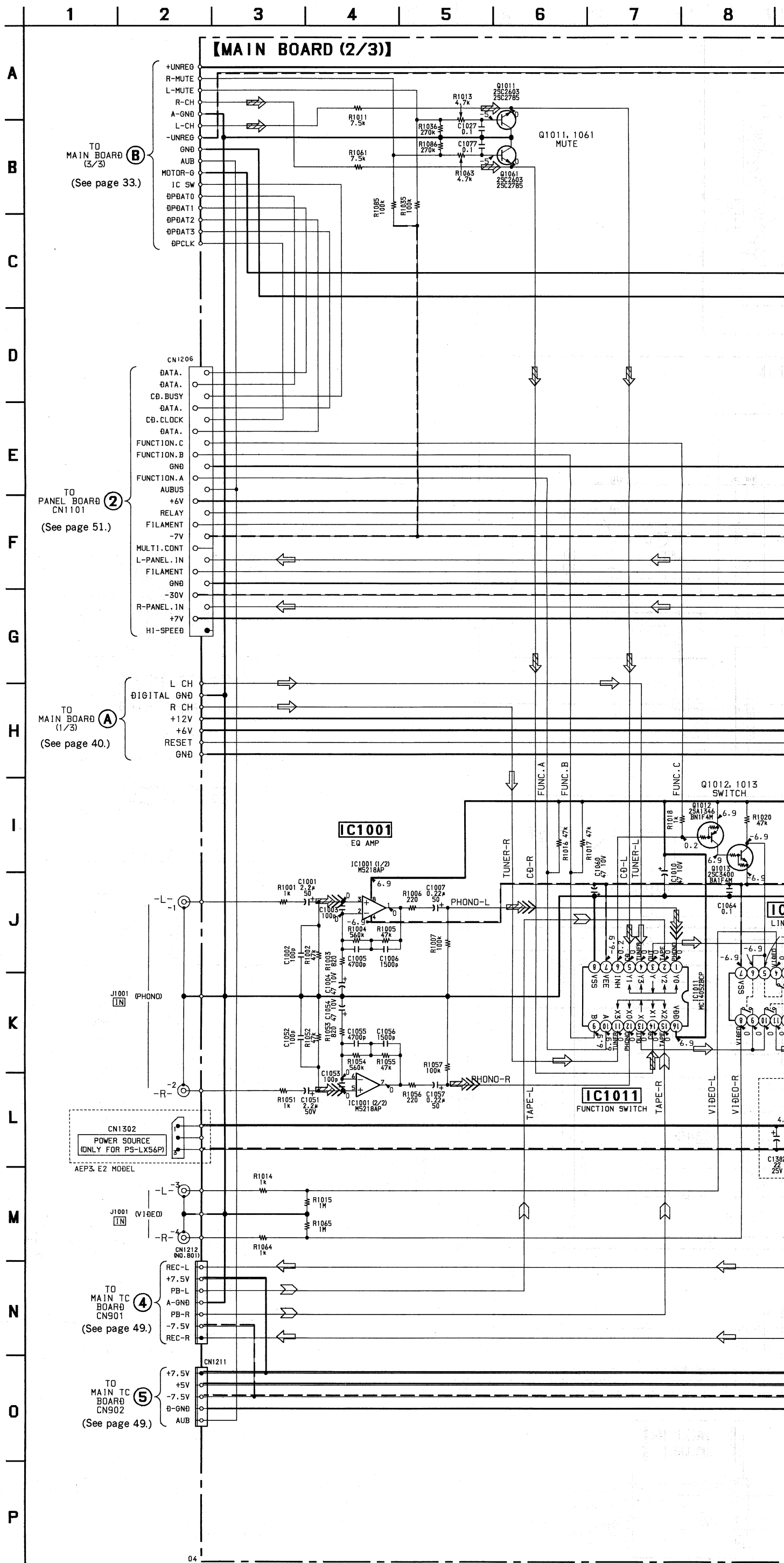


- Note:
- All capacitors are in μ F unless otherwise noted. pF: μ F 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and 1/4 W or less unless otherwise specified.
 - Δ : internal component.

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

- --- : B+ Line
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- no mark: CD STOP
- Voltages are taken with a VOM (Input Impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- $\Rightarrow$: CD

5-7. SCHEMATIC DIAGRAM—POWER SECTION— • Refer to page 58 for IC Block Diagrams.



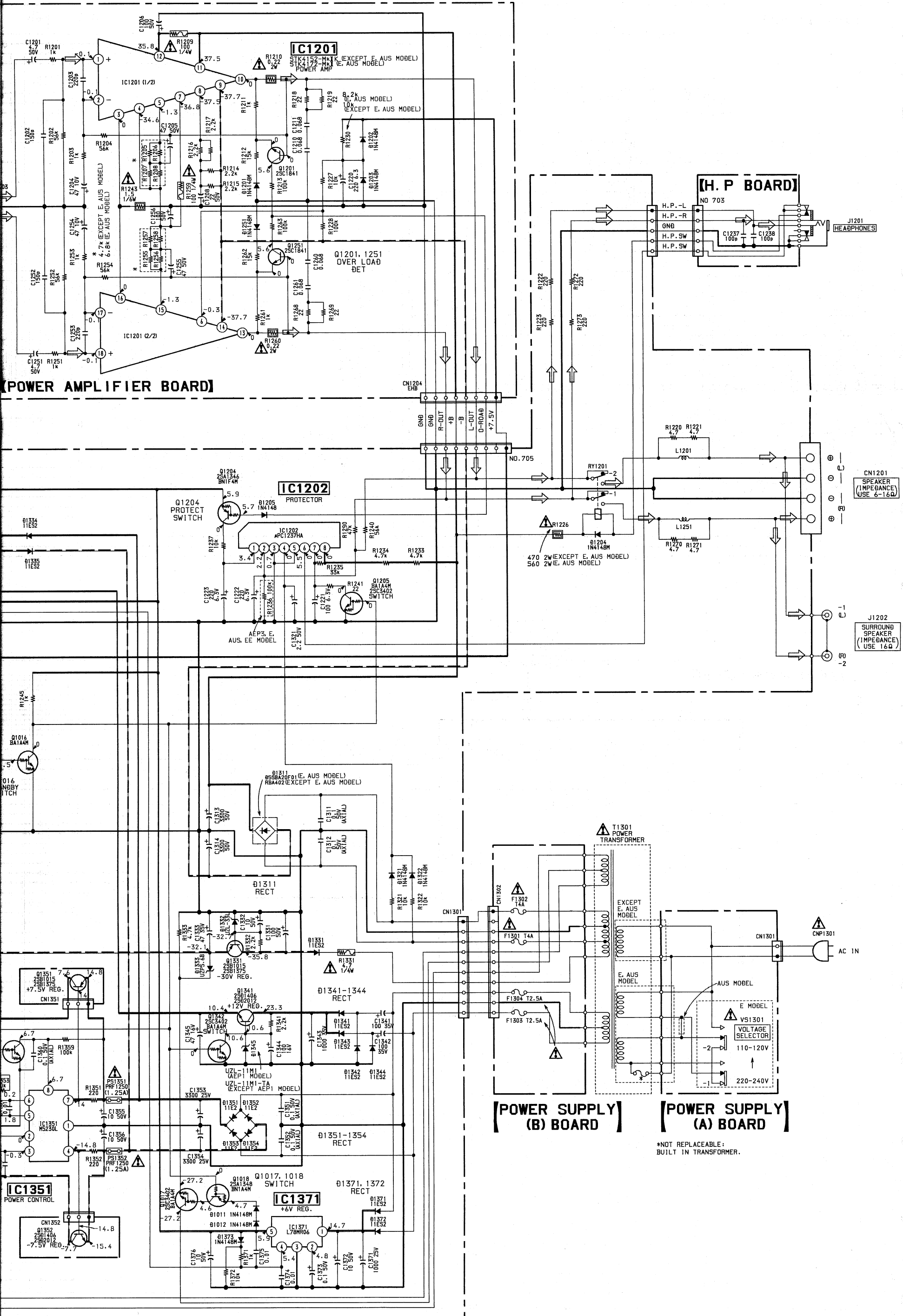
Note :

- All capacitors are in μF unless otherwise noted. pF : $\mu\mu\text{F}$ 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.

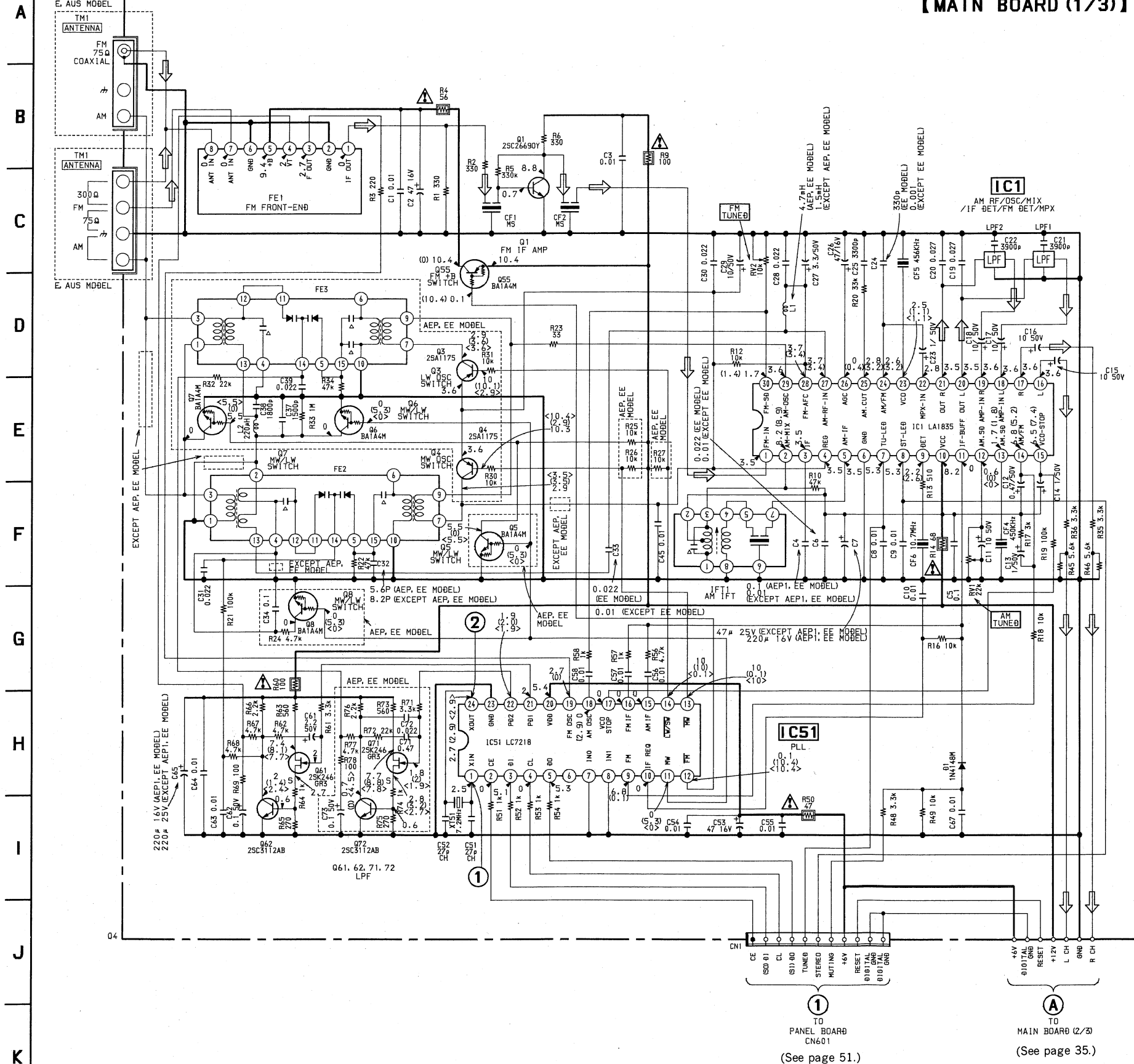
Note : The components identified by mark  or dotted line with mark  are critical for safety.
Replace only with part number specified.

-  : nonflammable resistor.
-  : fusible resistor.
-  : B+ Line
-  : B- Line
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
 - ➡ : FM
 - ⏏ : PB (DECK A)
 - ➡ : CD
 - ➡➡ : PHONO/VIDEO
- Abbreviations
 - EE : East European model
 - AUS : Australian model
 - AEP3 : AEP unit with PHONO SOURCE (Made in Indonesia)
 - E2 : AC 120V Area model





1	2	3	4	5	6	7	8	9	10	11
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1

7.2 MHz

3.7 Vp-p

IC 51 (1)

2

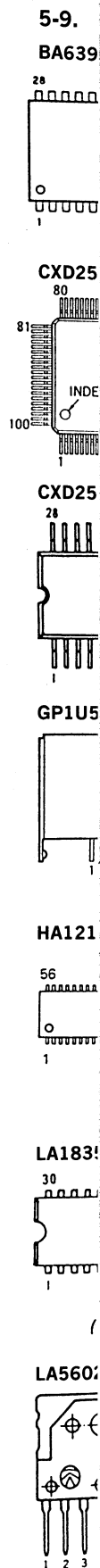
7.2 MHz

4.4 Vp-p

IC 51 (24)

- All capacitors are in μF unless otherwise noted. pF : $\mu\mu\text{F}$ 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- Δ : internal component.

-  : nonflammable resistor.
-  : B+ Line
-  : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
(): MW
< >: LW
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
 : FM
- Abbreviations
EE : East European model
AUS : Australian model
AEP1 : AEP unit with no PHONO POWER SOURCE
(Made in Malaysia)



1	2	3	4	5	6	7	8	9	10	11
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1

7.2MHz

3.7Vp-p

IC 51 (1)

2

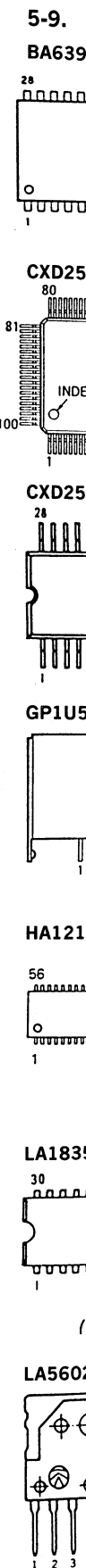
7.2MHz

4.4Vp-p

IC 51 (24)

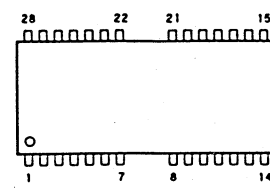
- All capacitors are in μF unless otherwise noted. $\text{pF} : \mu\text{F}$ 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- Δ : internal component.

-  : nonflammable resistor.
-  : B+ Line
-  : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
(): MW
< >: LW
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
 : FM
- Abbreviations
EE : East European model
AUS : Australian model
AEP1 : AEP unit with no PHONO POWER SOURCE
(Made in Malaysia)

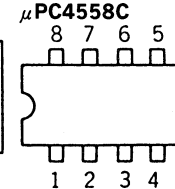


5-9. SEMICONDUCTOR LEAD LAYOUTS

BA6392FP

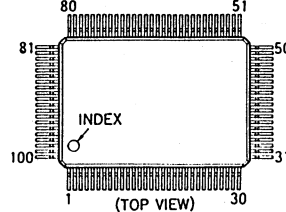


LB1639

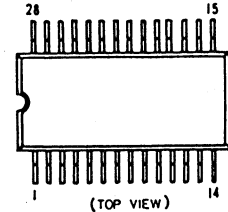


(Top view)

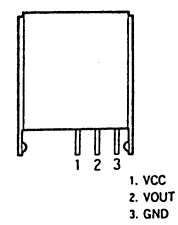
CXD2515Q-1



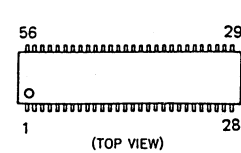
CXD2565M-1



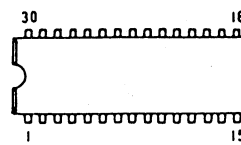
GP1U52XB



HA12171NT

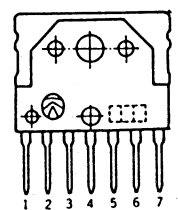
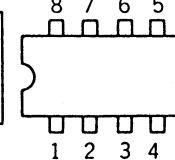


LA1835

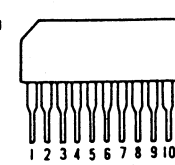
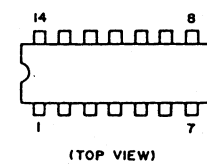


(Top view)

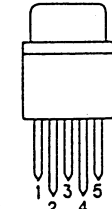
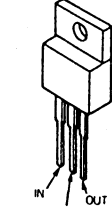
LA5602

 μ PC4558C

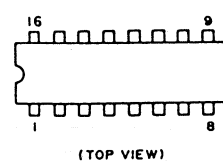
LB1641

LC7218-ST
MC14066BCP
M5218AP
SN74HC00AN

L78LR05D-MA

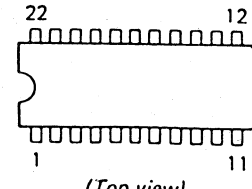
L78MR06
M5F78M07L
TA7805S

MC14052BCP



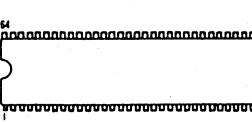
(Top view)

M5F78M12L



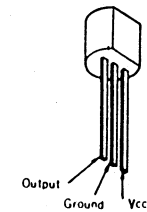
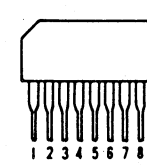
(Top view)

M50964-261FP

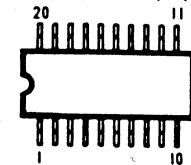


(Top view)

M51943BSL-TP

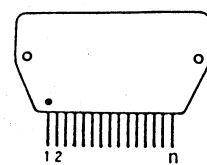
M5230L-A
 μ PC1237HA

NJL5165K-B (HI)



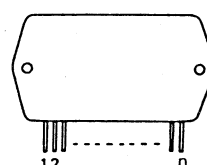
(Top view)

STK-4152MK2K

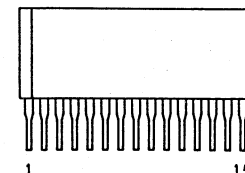


MARKING SIDE VIEW

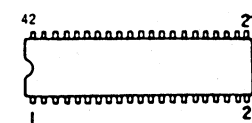
STK-4172MK2



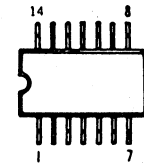
TA8242AK



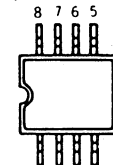
TMP87CH46N-4067



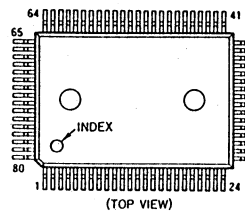
(Top view)

 μ PC1330GR-T1

(TOP VIEW)

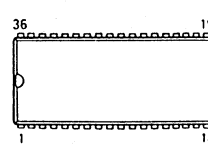
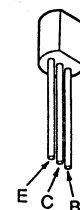
 μ PC4570G2

(TOP VIEW)

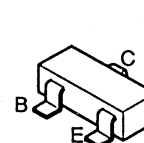
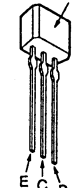
 μ PD78042GF-053-3B9

(TOP VIEW)

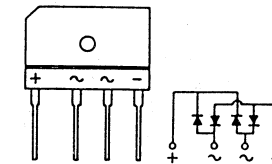
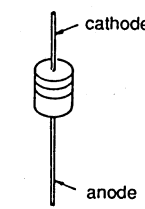
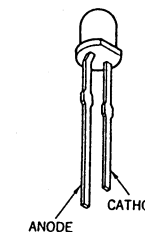
XR-1096

DTA114ES
DTA124ES
DTA144ES
DTC114ES
DTC124ES
DTC144ES
2SC2669-OY
2SC3622A-LK2SA1015-GR
2SB1068-L
2SC1841-PAFAEA
2SC2001TP-K1K2
2SC3112-B
2SD1616A-K

2SA1162-G

2SA1175-HFE
2SC2785-HFE
LETTER SIDE2SB1094-LK
2SD2012

2SK246-GR3

D3SBA20-4101
D5SBA20F01
RBA-402
RBV-602UZ-4.7BSB
UZL-11M1
UZL-33L
UZP-5.6B
1N4148M
11ES2SEL5220S-TH8C
SEL5221S-TH8C
SEL5421E-TH8C
SEL5821A-TH8C

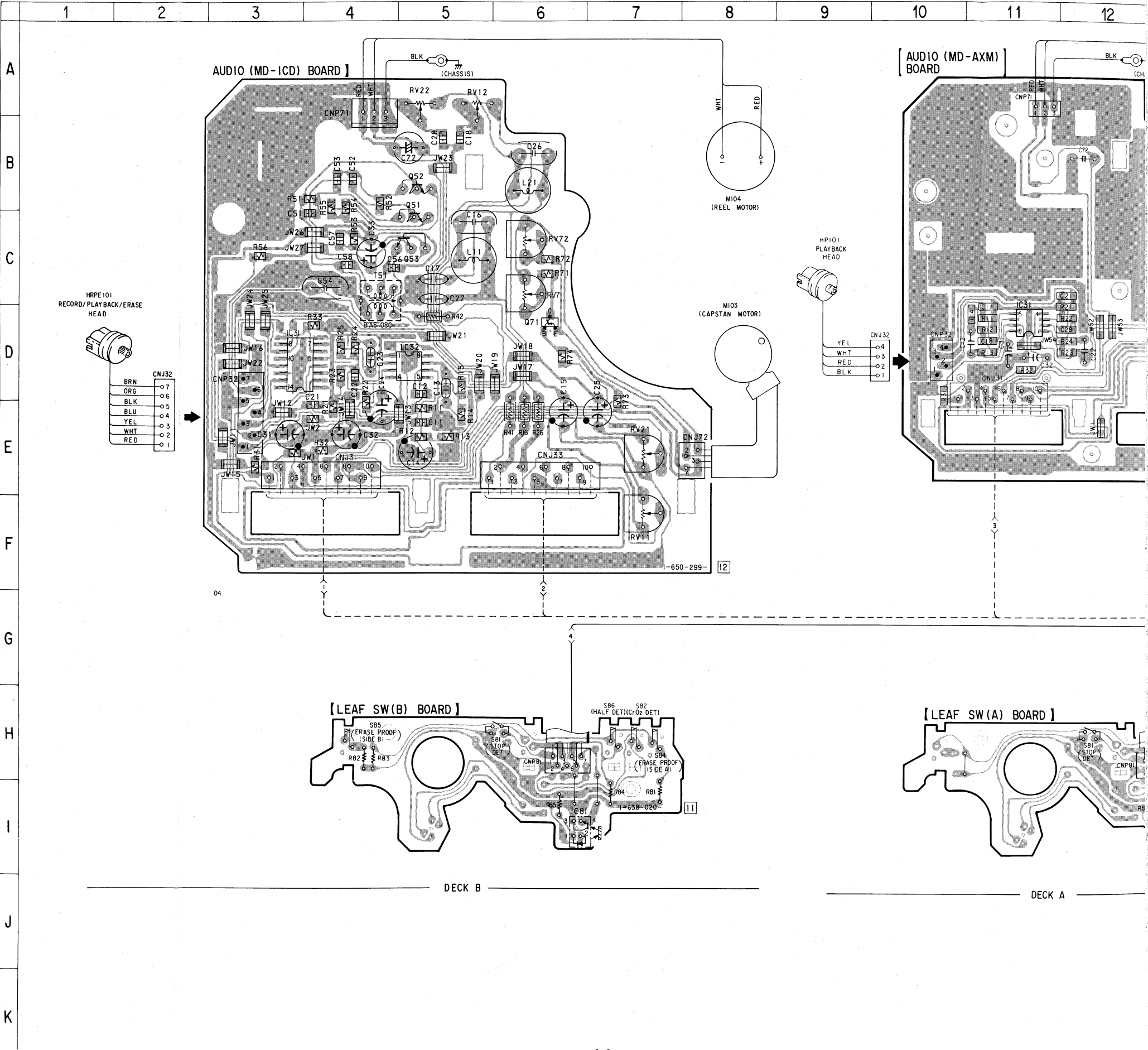
5-10. PRINTED WIRING BOARDS—DECK SECTION— • Refer to page 41 for Semiconductor Lead Layouts.

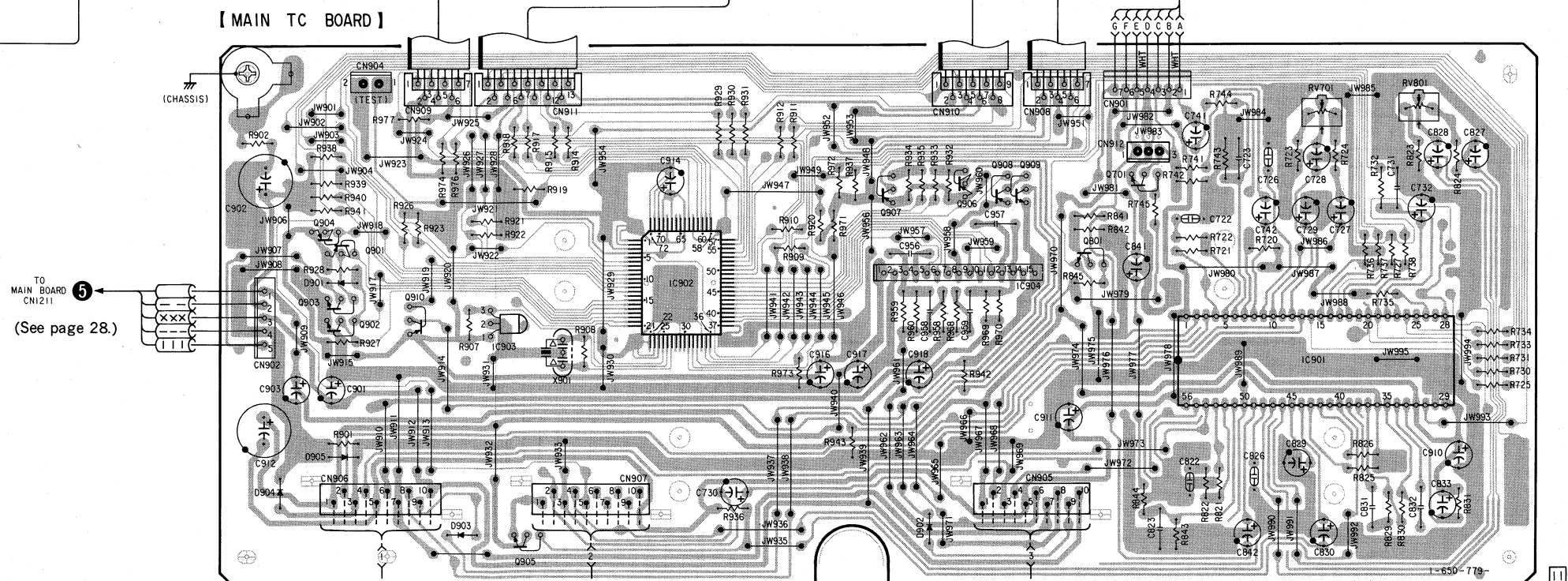
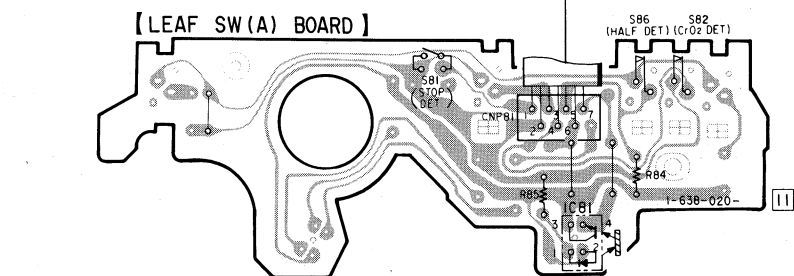
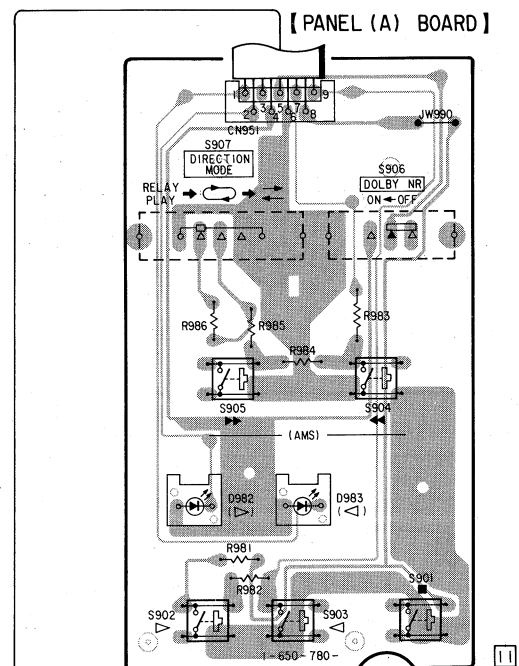
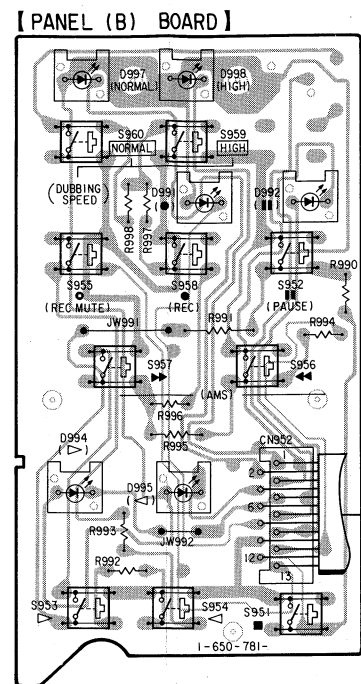
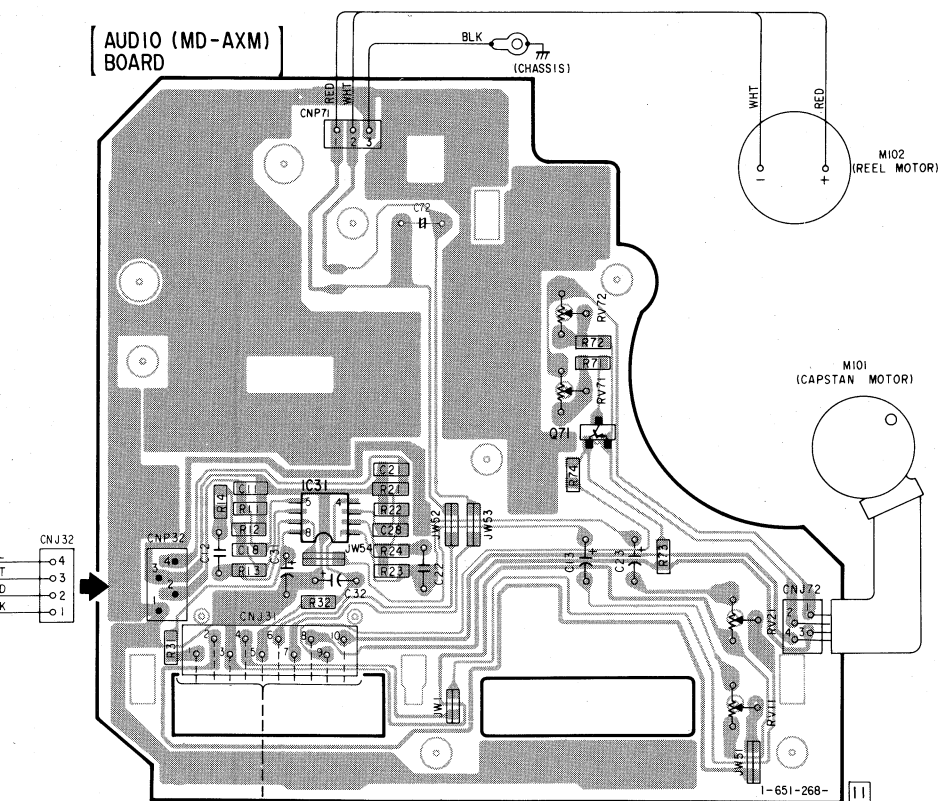
• Semiconductor Location

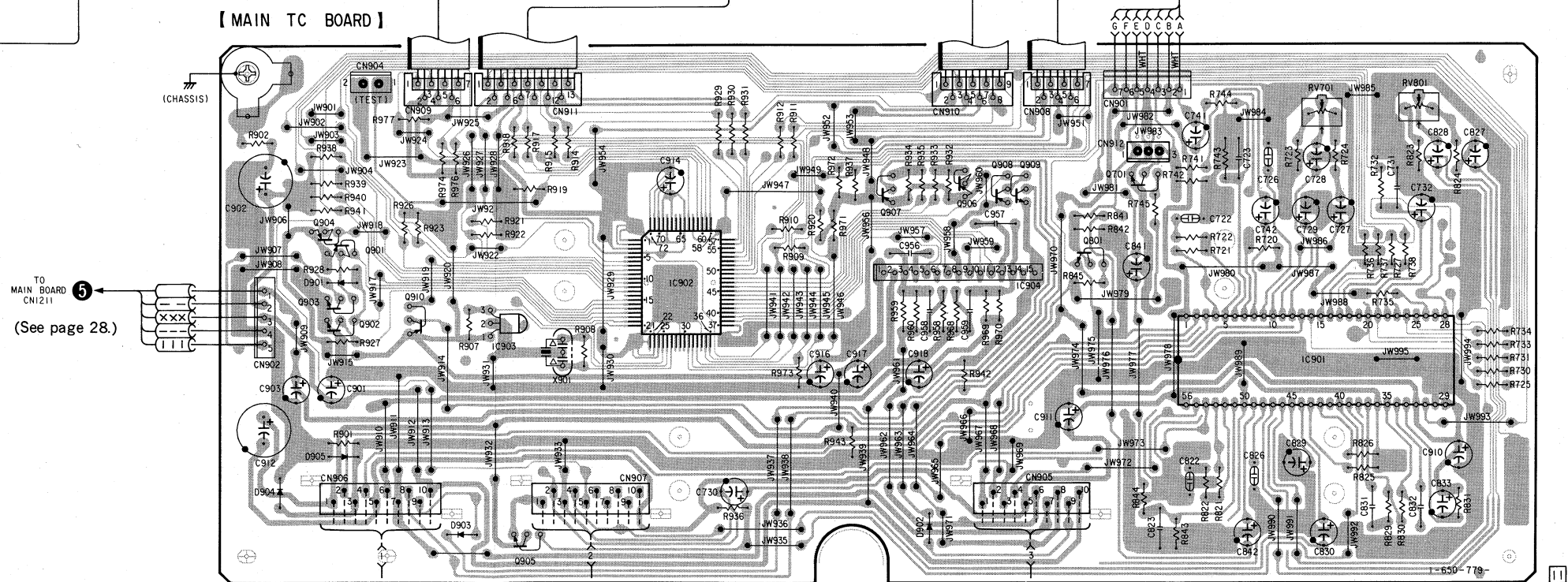
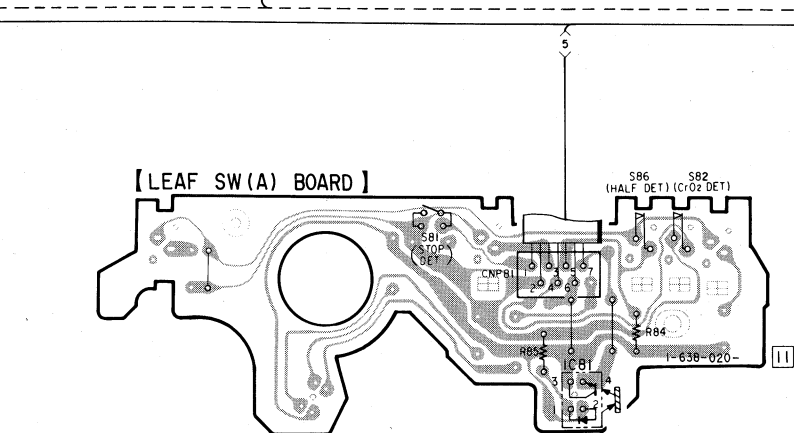
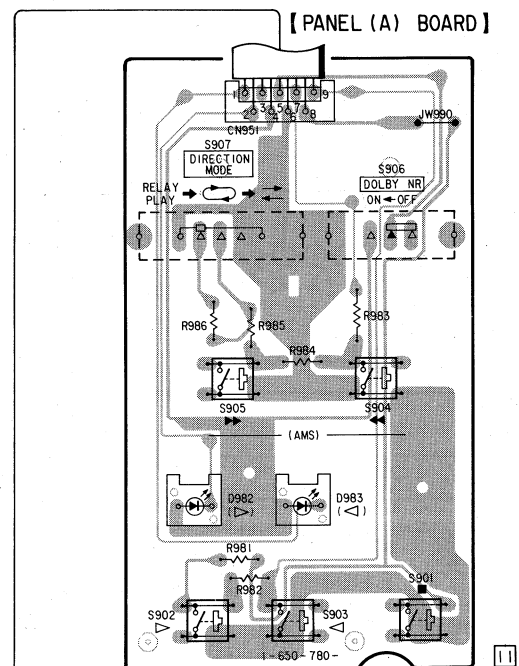
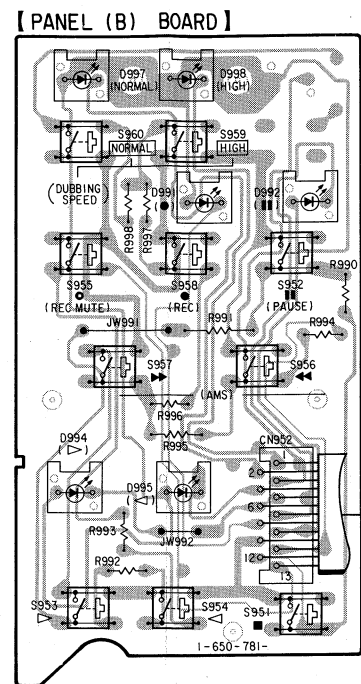
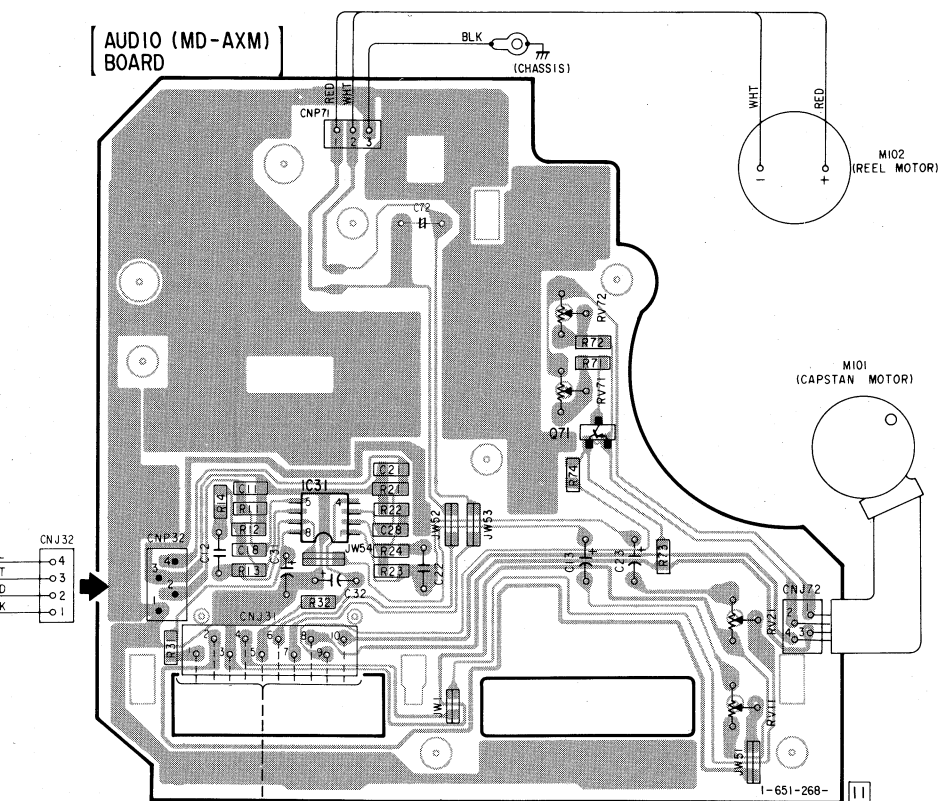
Ref. No.	Location
D901	I-18
D902	K-22
D903	K-19
D904	J-17
D905	J-18
D982	D-24
D983	D-24
D991	B-19
D992	B-20
D994	D-19
D995	D-19
D997	B-19
D998	B-19
IC31	D-3
(IC31)	C-11
IC32	D-5
IC81	I-6
(IC81)	I-13
IC901	I-25
IC902	I-20
IC903	I-19
IC904	I-23
Q51	C-5
Q52	B-5
Q53	C-5
Q71	D-6
(Q71)	C-13
Q701	H-24
Q801	H-23
Q901	H-18
Q902	I-18
Q903	I-18
Q904	H-18
Q905	K-19
Q906	H-22
Q907	H-22
Q908	H-23
Q909	H-23
Q910	I-18

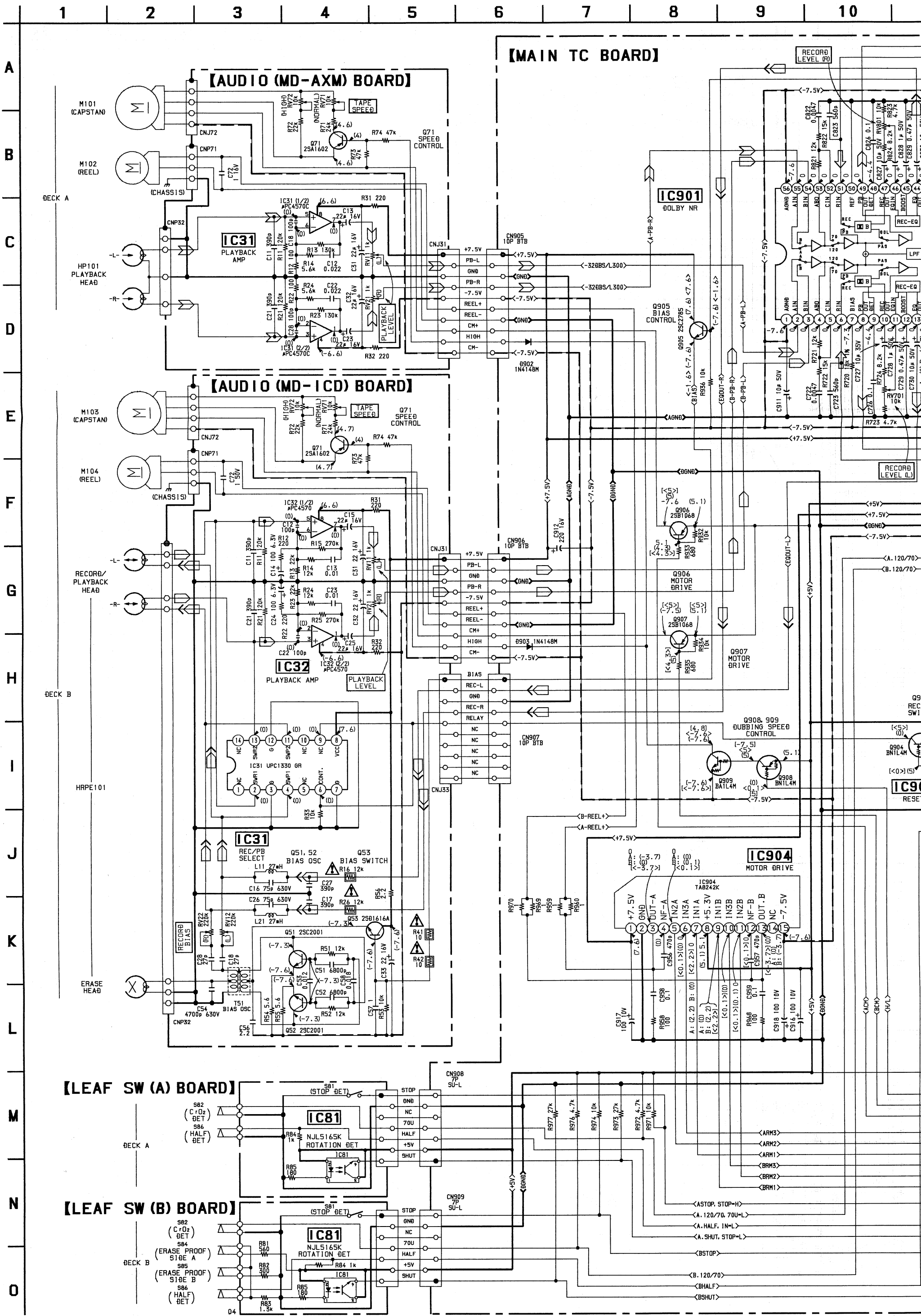
(): DECK A

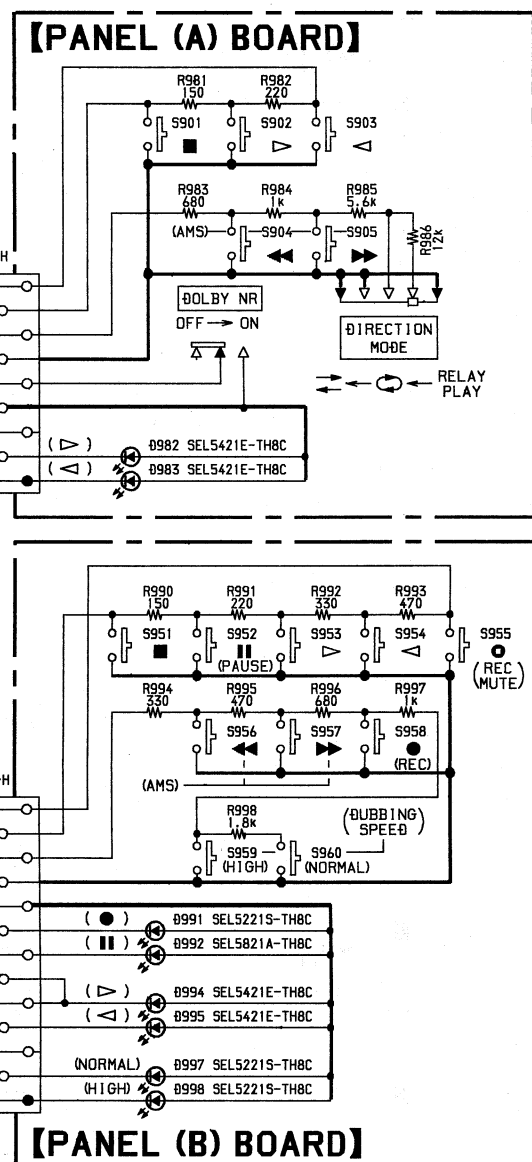
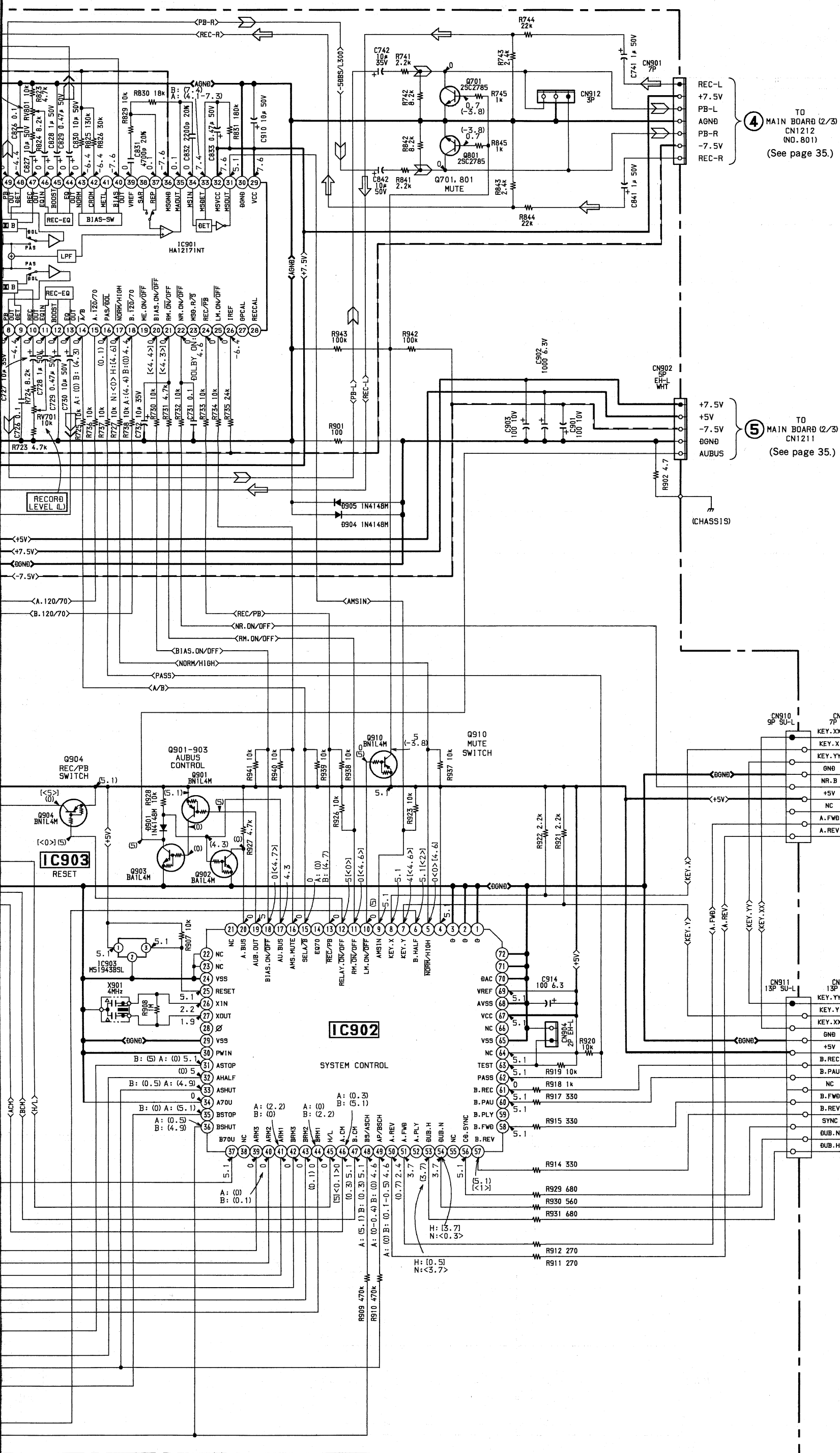
Note :
• ○ : parts extracted from the component side.
• ■ : Pattern on the side which is seen.

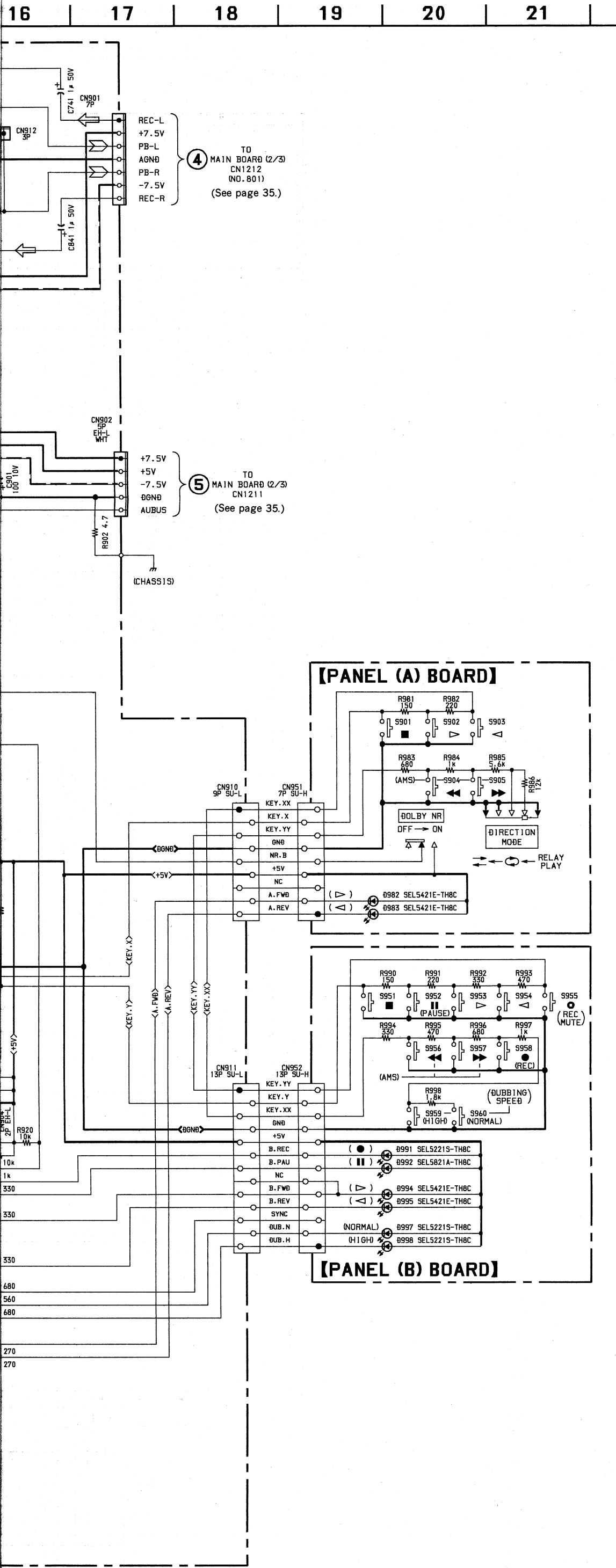












Note :

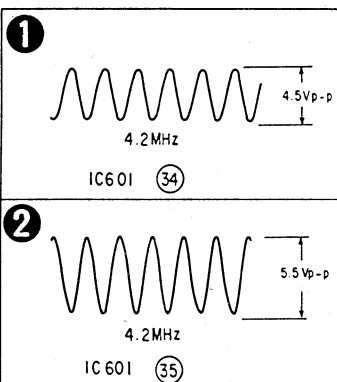
- All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- Δ : internal component.

Note : The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

- $\square$: nonflammable resistor.
- --- : B+ Line
- --- : B- Line
- $\square$: adjustment for repair.
- Voltage is dc with respect to ground under no-signal conditions.
- no mark: FM
- (): PB
- < > : NORMAL SPEED DUBBING
- [] : HIGH SPEED DUBBING
- [< >] : DUBBING
- A : DECK A PB
- B : DECK B PB
- Voltages are taken with a VOM (Input Impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Signal path.
 - $\Rightarrow$: FM
 - $\Rightarrow$: PB (DECK A)
 - $\Rightarrow$: PB (DECK B)
 - $\Rightarrow$: REC (DECK B)

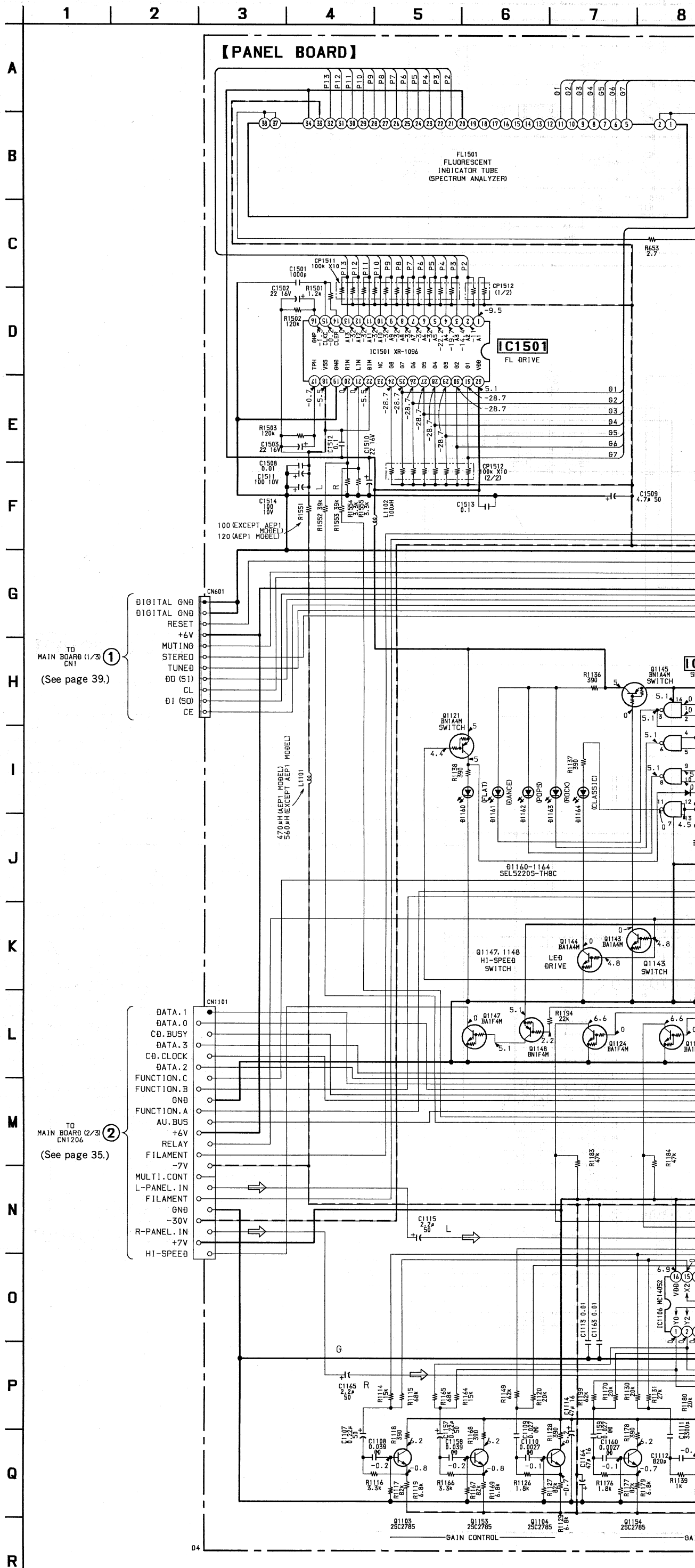
5-12. SCHEMATIC DIAGRAM—PANEL SECTION— • Refer to page 58 for IC Block Diagrams.

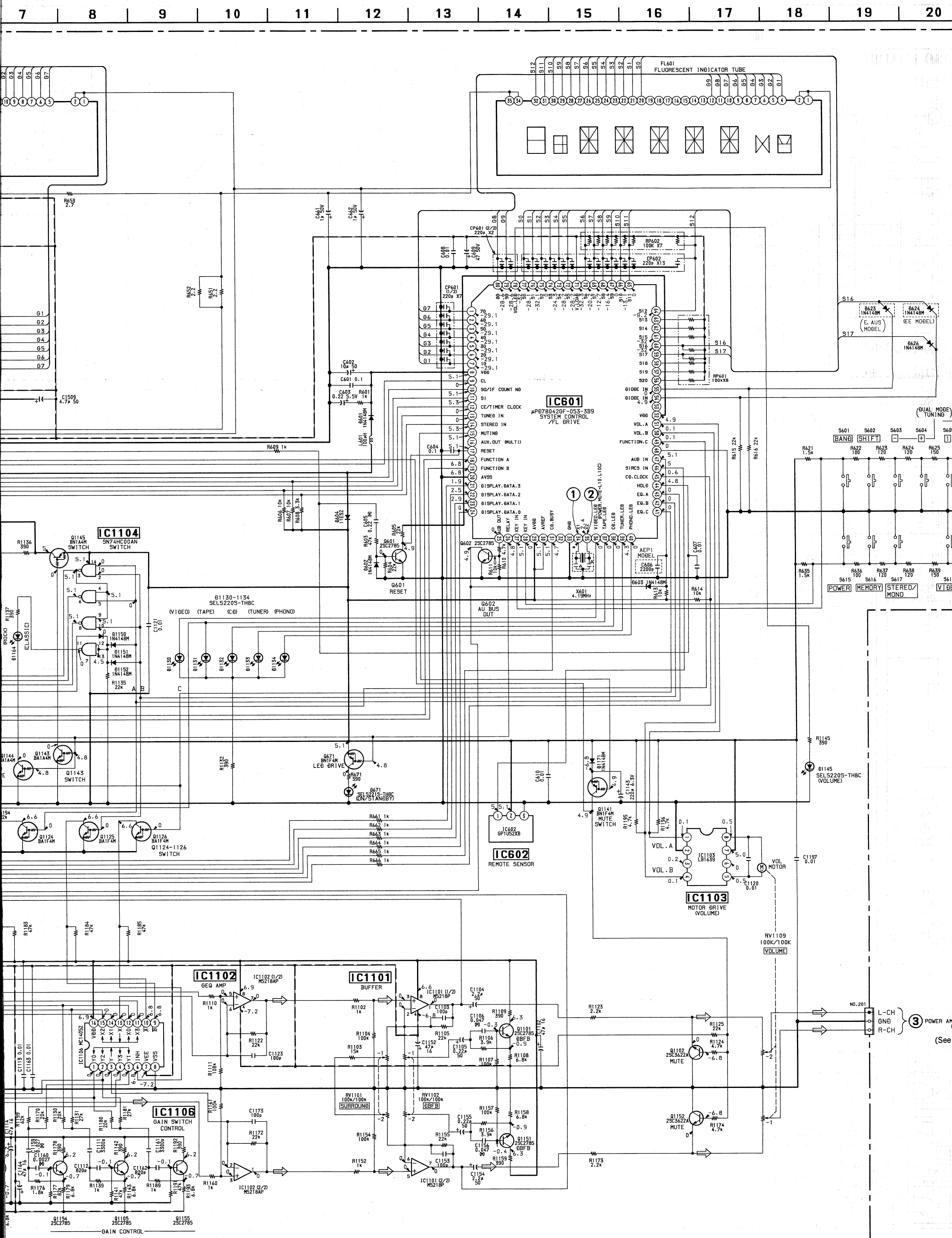
• Waveforms

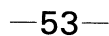


Note:

- All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- Δ : internal component.
- : B+ Line
- : B- Line
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
- Voltages are taken with a VOM (Input Impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- $\Rightarrow$: FM
- Abbreviations
- AUS : Australian model
- EE : East European model
- AEP1 : AEP unit with no PHONO POWER SOURCE (Made in Malaysia)

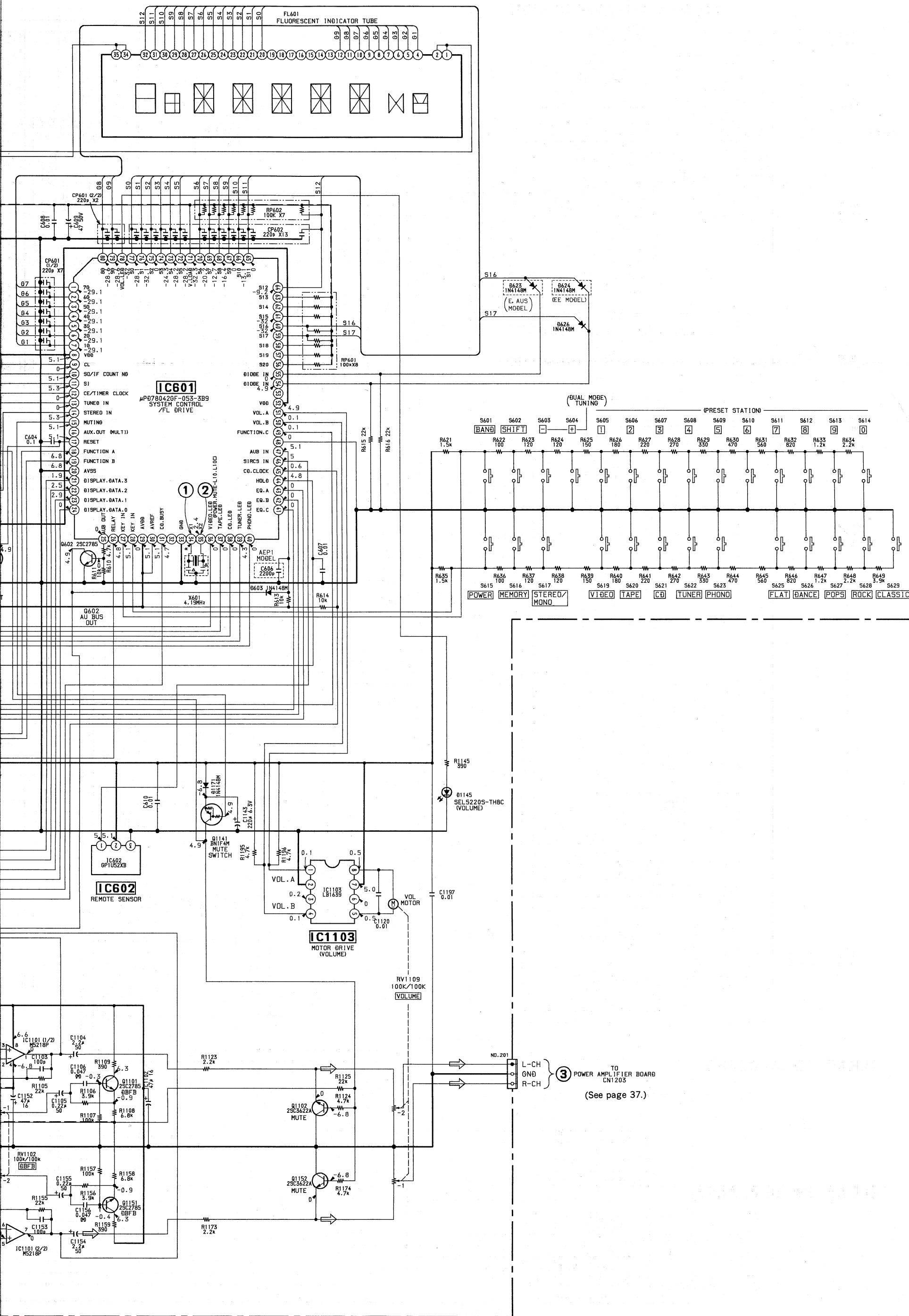




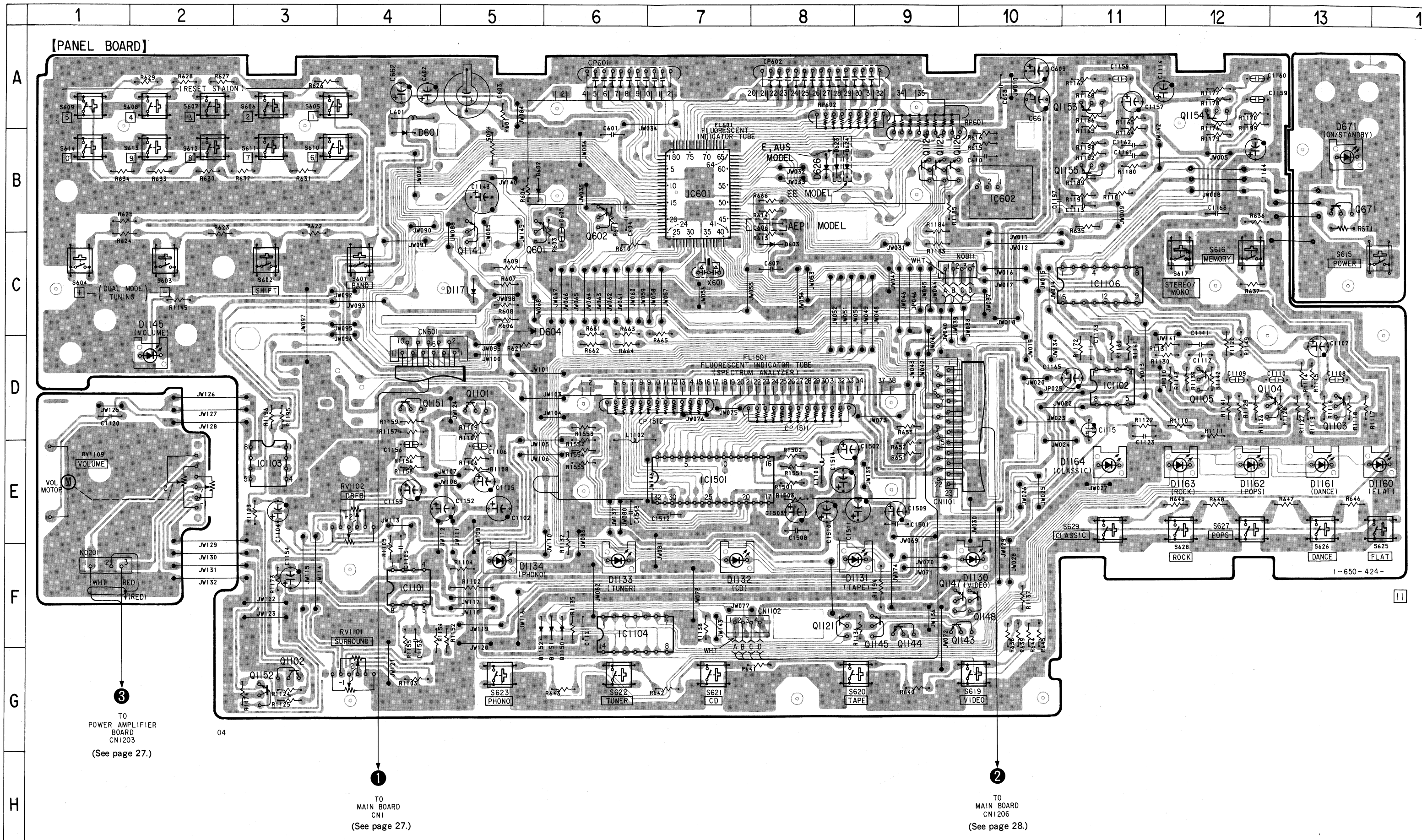


(See p

(See p

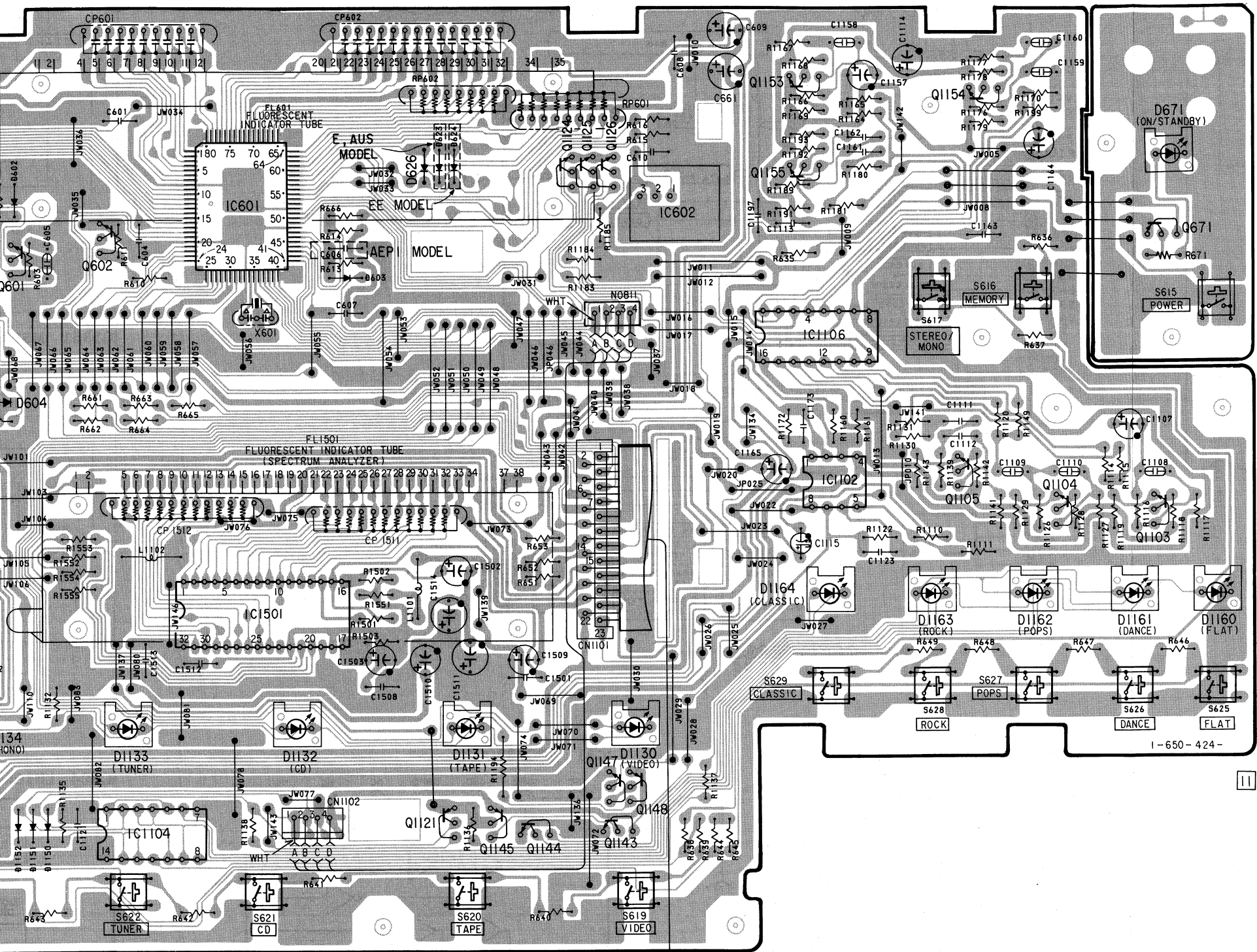


5-13. PRINTED WIRING BOARD—PANEL SECTION— • Refer to page 41 for Semiconductor Lead Layouts.



ad Layouts.

6 7 8 9 10 11 12 13 14



• Semiconductor Location

Ref. No.	Location
D601	B-4
D602	B-5
D603	C-8
D604	C-5
D623	B-8
D624	B-8
D626	B-8
D671	B-13
D1130	F-10
D1131	F-8
D1132	F-7
D1133	F-6
D1134	F-5
D1145	D-2
D1150	F-6
D1151	F-5
D1152	F-5
D1160	E-13
D1161	E-13
D1162	E-12
D1163	E-12
D1164	E-11
D1171	C-5
IC601	B-7
IC602	B-10
IC1101	F-4
IC1102	D-11
IC1103	E-3
IC1104	F-6
IC1106	C-11
IC1501	E-7
Q601	C-5
Q602	B-6
Q671	B-13
Q1101	D-5
Q1102	G-3
Q1103	D-13
Q1104	D-12
Q1105	D-12
Q1121	F-8
Q1124	B-9
Q1125	B-9
Q1126	B-9
Q1141	C-5
Q1143	F-9
Q1144	F-9
Q1145	F-9
Q1147	F-9
Q1148	F-10
Q1151	D-4
Q1152	G-3
Q1153	A-11
Q1154	A-12
Q1155	B-11

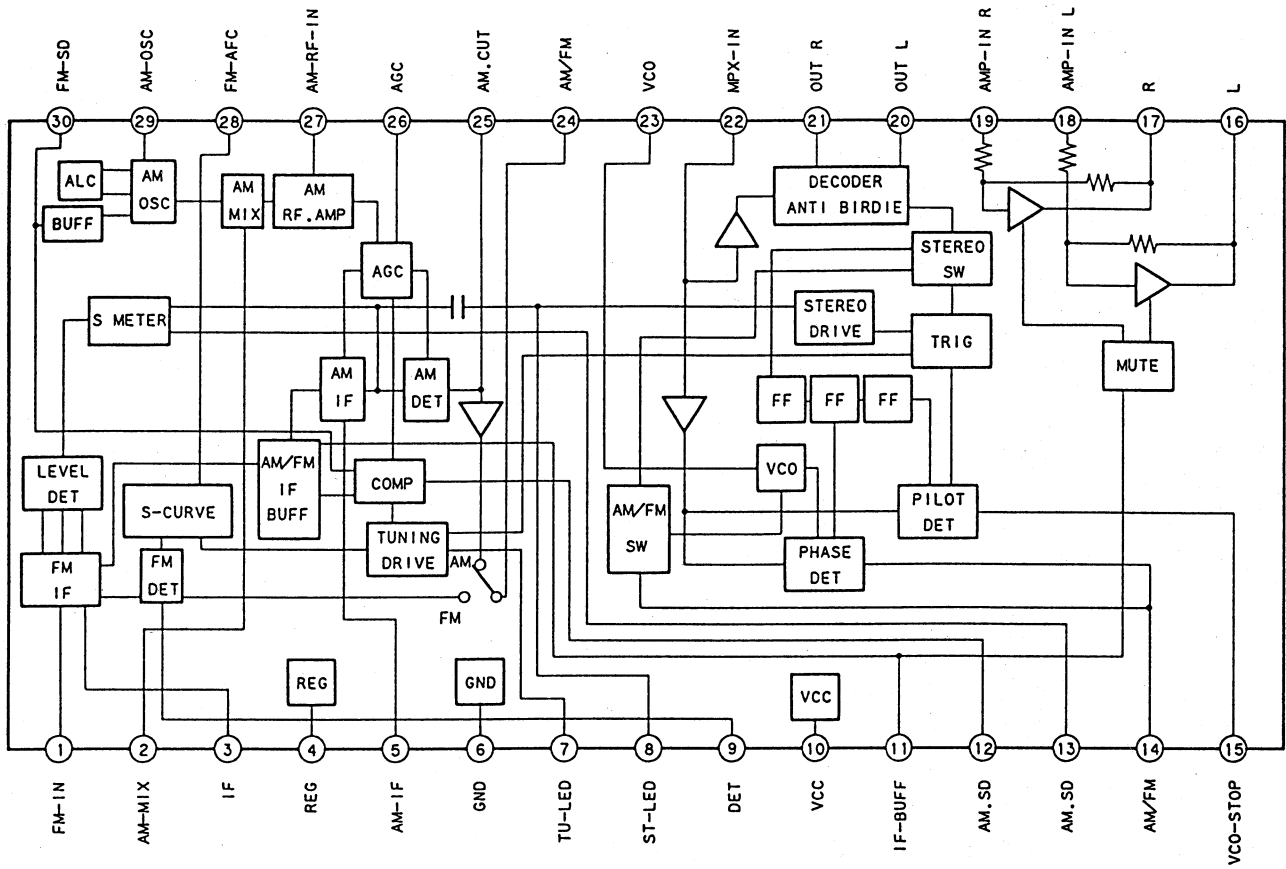
Note :

- : parts extracted from the component side.
- : Pattern on the side which is seen.
- Abbreviations
 - AUS : Australian model
 - EE : East European model
 - AEP1 : AEP unit with no PHONO POWER SOURCE (Made in Malaysia)

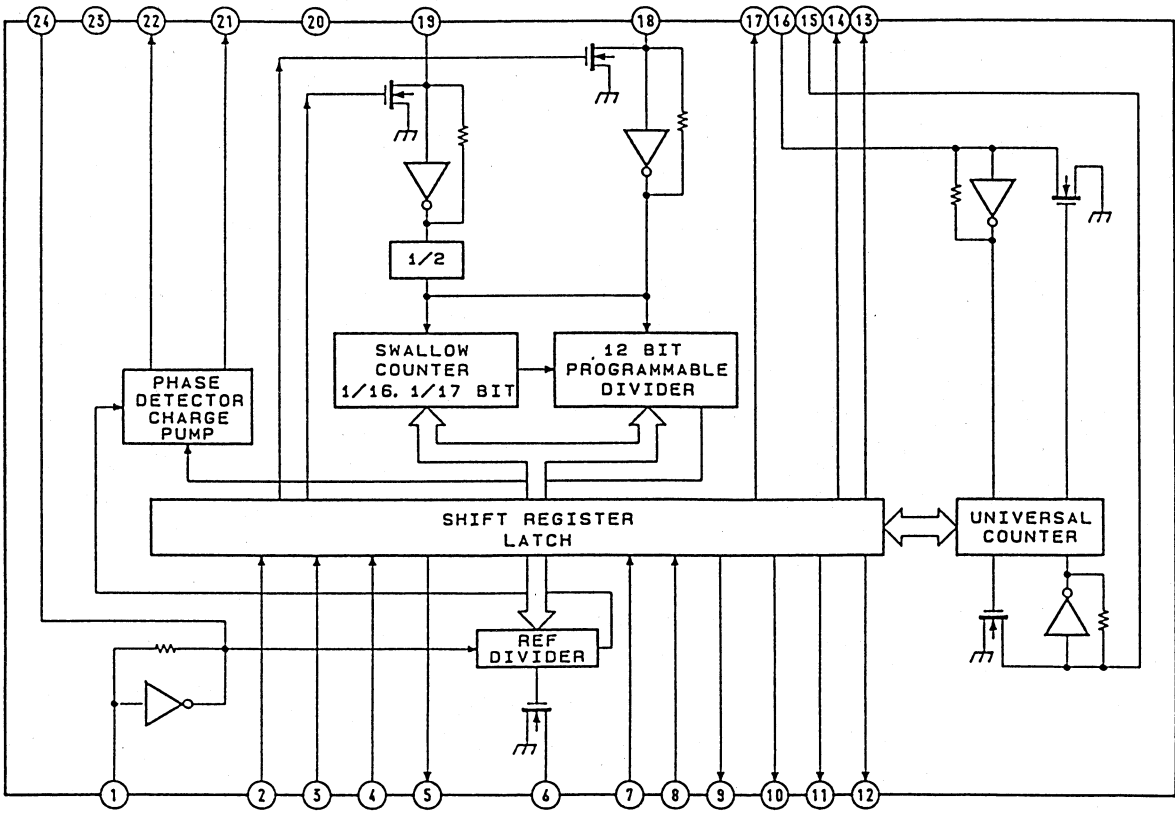
2
TO
MAIN BOARD
CN1206
(See page 28.)

• IC Block Diagrams

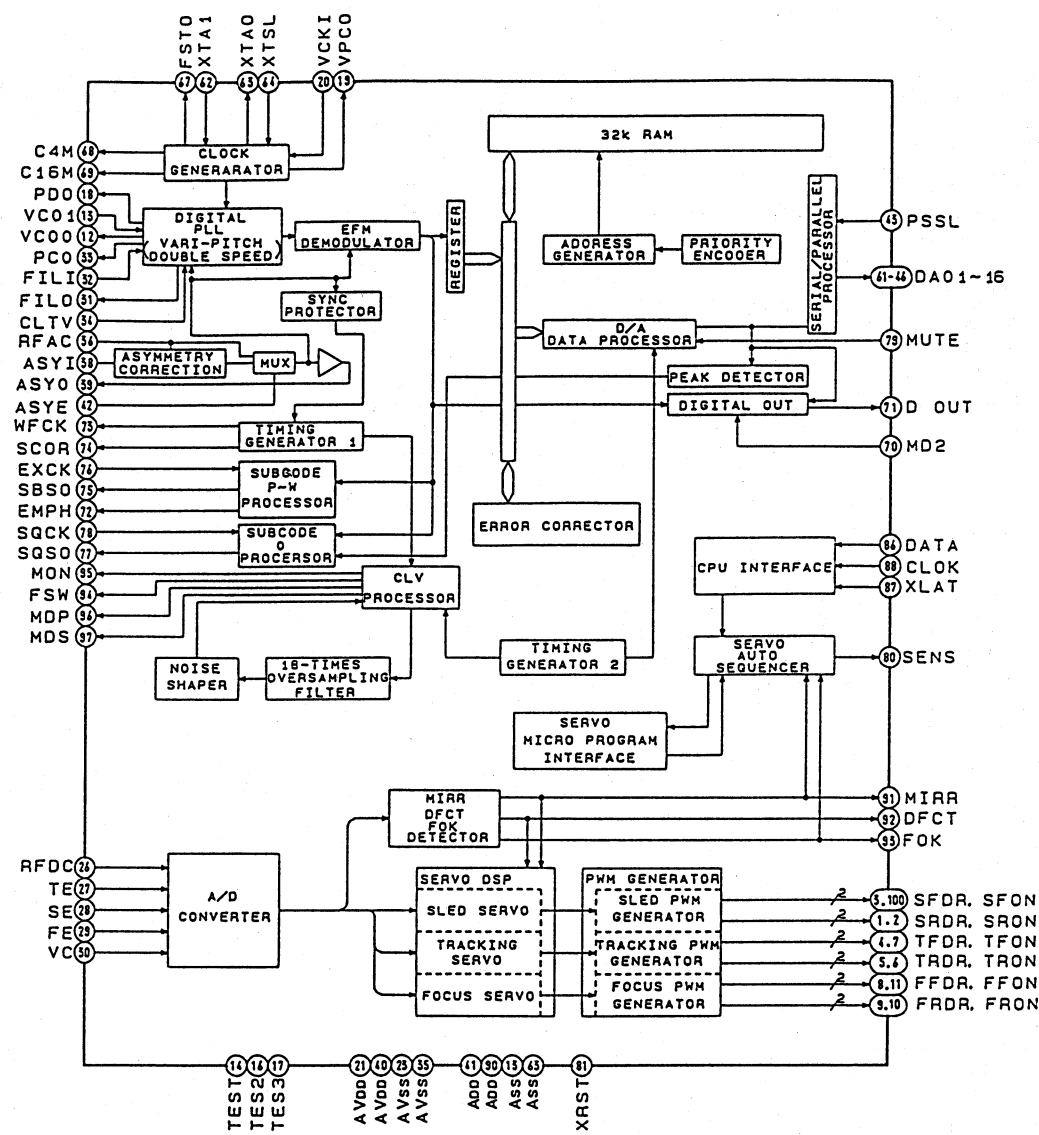
IC1 LA1835



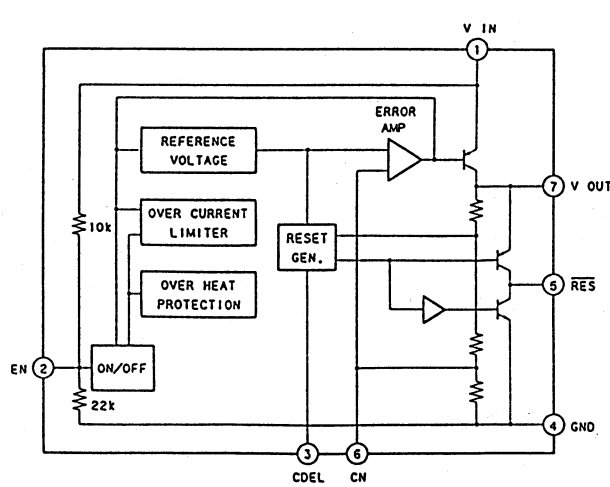
IC51 LC7218



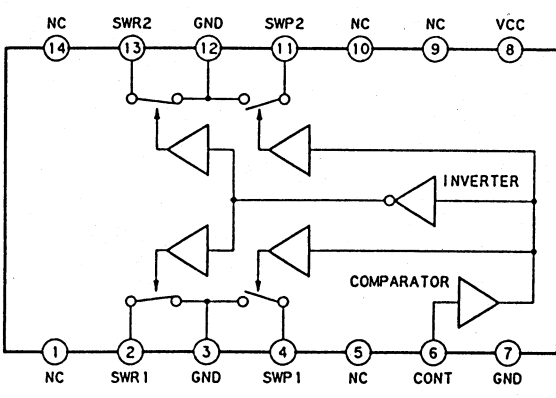
IC101 CXD2515Q



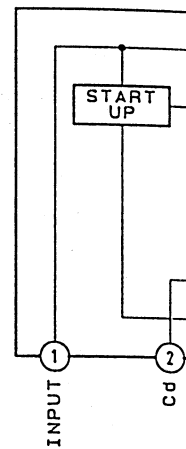
IC301 LA5620



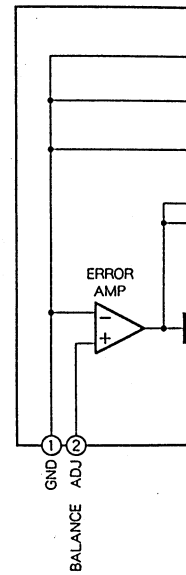
IC31 μPC1330GR



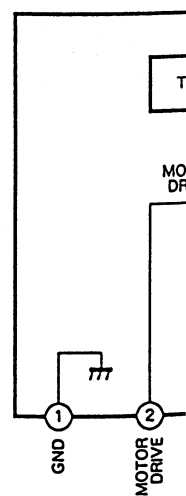
IC302 L78LR
IC1371 L78M



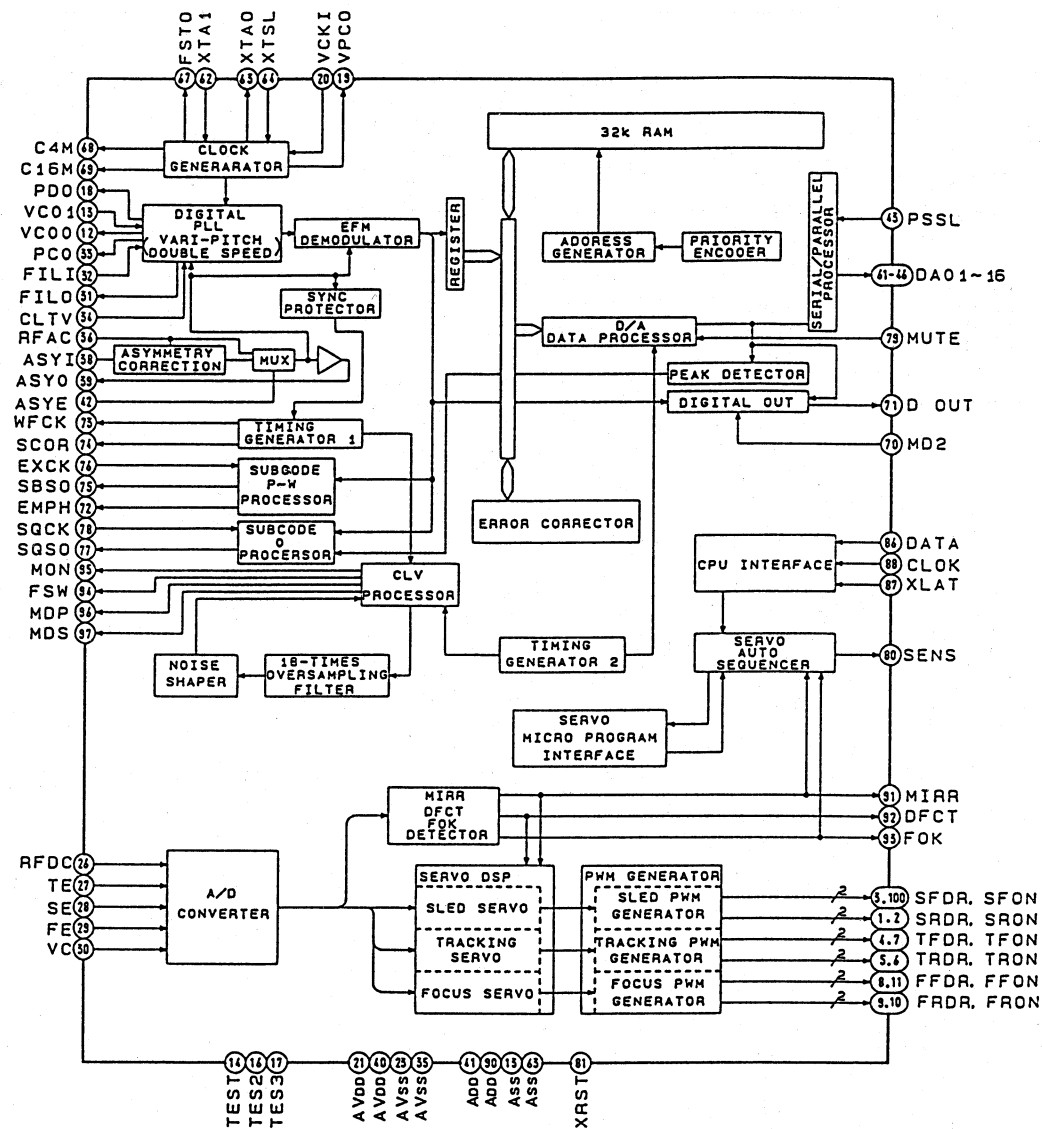
IC1351 M523



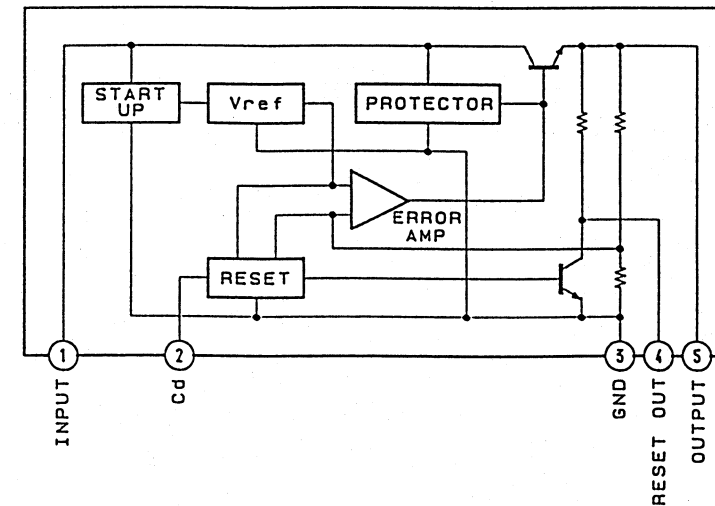
IC304 LB164



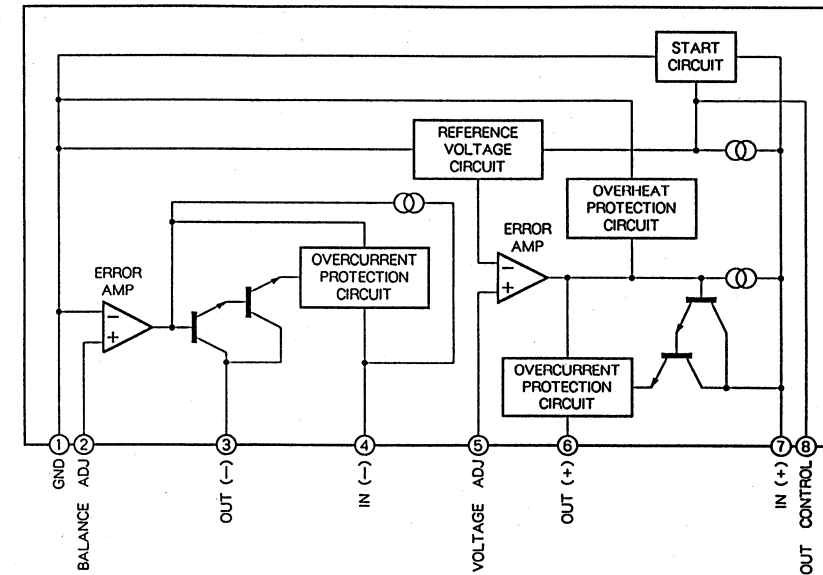
IC101 CXD2515Q



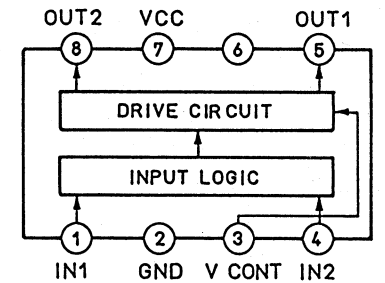
IC302 L78LR05
IC1371 L78MR06



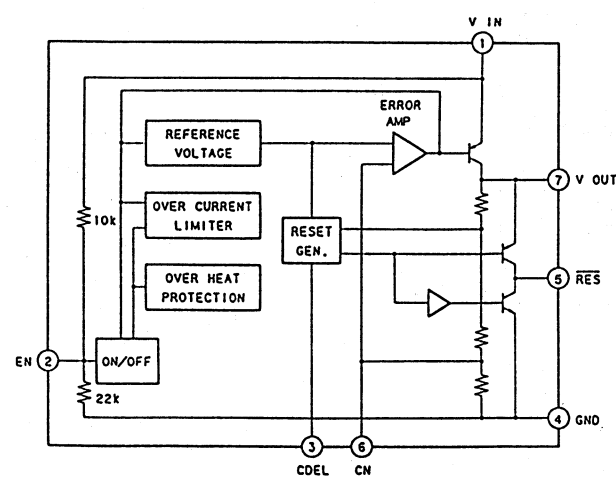
IC1351 M5230L-A



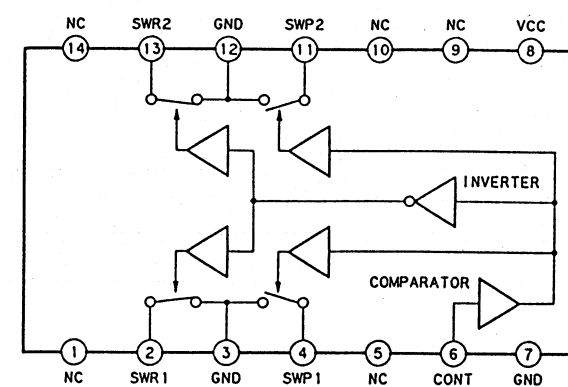
IC1103 LB1639



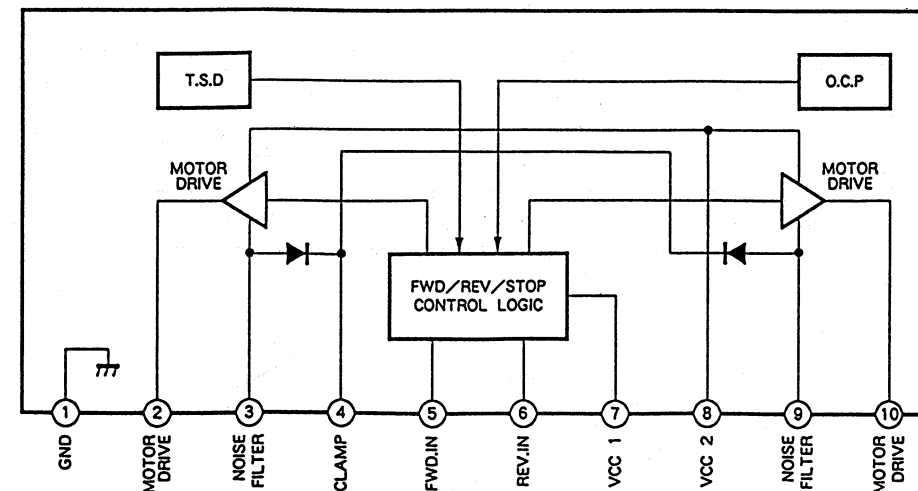
IC301 LA5620



IC31 μ PC1330GR



IC304 LB1641

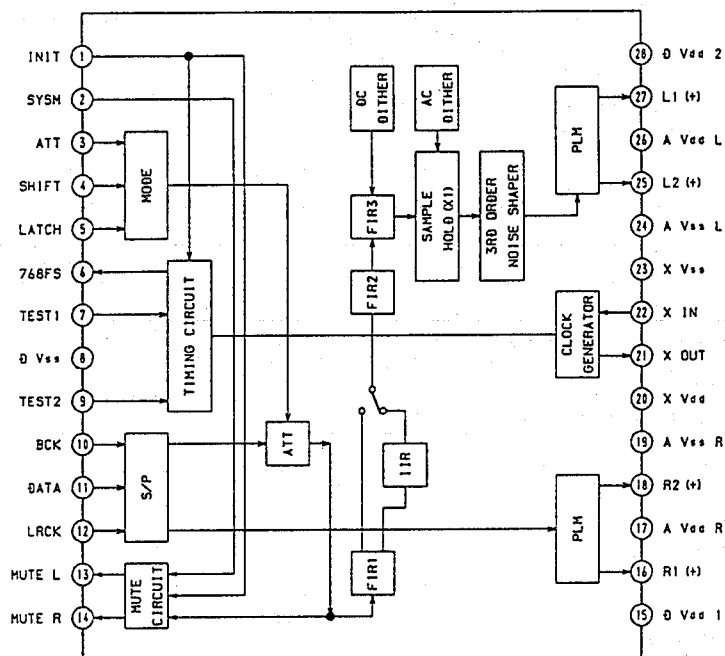


5-14. PIN DESCRIPTIONS

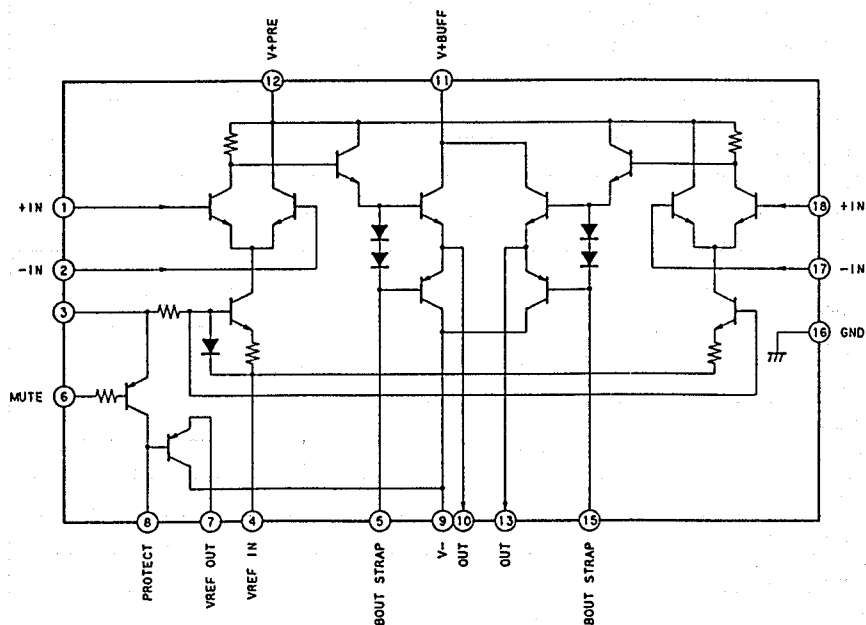
• IC303 TMP87CH46N-4067

Pin No.	Pin Name	I/O	Pin Description
1	DATA	O	Command data to CXD2515Q.
2	CLK	O	Command clock to CXD2515Q.
3	PLAY	O	LED of PLAY.
4	SUBQ	I	To Q code output of CXD2515Q.
5	SQCLK	O	Clock of on read Q code.
6	PRGL	—	Not used.
7	XLT	O	For CXD2515Q latch.
8	SCOR	I	Large frame synchronization signal. 75Hz.
9	PAUSE	O	LED of PAUSE.
10	ICSW	O	CD power supply control pin. OFF : L, ON : H.
11	AMUTE	O	Mute. To CXD2515Q.
12	SCLK	O	Servo mode for read clock.
13	LDON	O	Laser diode ON/OFF.
14	—	—	Not used.
15	—	—	Not used.
16	SENSE	I	SENSE of CXD2515Q.
17	TEST	I	Connect to GND.
18	RESET	I	Reset pin of microcomputer.
19	X1	I	Oscillator connecting input pin. 8MHz.
20	X2	O	Oscillator connecting output pin. 8MHz.
21	GND	—	GND
22	VAREF	I	Reference voltage of A/D change.
23	KEYIN0	I	A/D key input
24	KEYIN1	I	A/D key input
25	KEYIN2	I	A/D key input
26	DPCLK	O	Display clock
27	DPDAT0	O	Display data
28	DPDAT1	O	Display data
29	DPDAT2	O	Display data
30	DPDAT3	O	Display data
31	EMPH	—	Not used.
32	KEYREQ	I	Key request
33	AUBIN	I	AU BUS input pin
34	AUBOUT	O	AU BUS output pin
35	LODOUT	O	Tray out
36	LODIN	O	Tray in
37	OUTSW	I	Tray out switch
38	INSW	I	Tray in switch
39	A-FUNC	I	Auto function ON/OFF select
40	ADJ	I	CD test mode pin (ADJ). Normally, 5V pull up.
41	AFADJ	I	CD test mode pin (AFADJ). Normally, 5V pull up.
42	+5V	—	+5V power supply pin

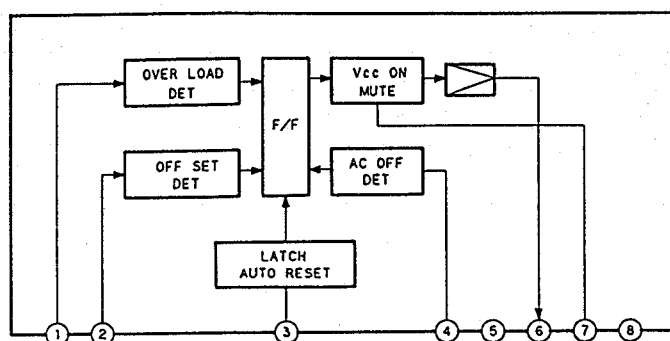
IC103 CXD2565M



IC1201 STK4172-MK2 (AEP, EE)
STK4152-MK2K (E, AUS)



IC1202 μ PC1237HA



• IC601 μ PD78042GF-053-3B9

Pin No.	Pin Name	I/O	Pin Description
1	7G	O	FL tube digit output
2	6G	O	FL tube digit output
3	5G	O	FL tube digit output
4	4G	O	FL tube digit output
5	3G	O	FL tube digit output
6	2G	O	FL tube digit output
7	1G	O	FL tube digit output
8	VDD	—	Microcomputer power (5V)
9	CL	O	Serial clock output to LC7218 (PLL IC).
10	SO/IF COUNT NG	O	Serial data output to LC7218 (PLL IC).
11	SI	I	Serial data input from LC7218 (PLL IC).
12	CE/TIMER CLOCK	I	Chip enable input from LC7218 (PLL IC).
13	TUNED IN	I	Modulation signal from tuner block. (L...Field)
14	STEREO IN	I	Stereo signal from tuner block. (L...FM STEREO received)
15	MUTING	O	Audio mute (L: Mute)
16	AUX. OUT	—	Not used.
17	RESET	—	Microcomputer reset pin
18	FUNCTION A	O	Function control
19	FUNCTION B	O	Function control
20	AVSS	—	A/D GND for key input.
21	DISPLAY. DATA. 3	I	CD display data bit 3
22	DISPLAY. DATA. 2	I	CD display data bit 2
23	DISPLAY. DATA. 1	I	CD display data bit 1
24	DISPLAY. DATA. 0	I	CD display data bit 0
25	AUB. OUT	O	AU BUS output
26	RELAY	—	Not used.
27	KEY IN1	I	Key input (A/D change line 1)
28	KEY IN0	I	Key input (A/D change line 0)
29	AVDD	—	A/D power for key input (5V)
30	AVREF	—	A/D reference voltage (5V)
31	CD. BUSY	I	At H, CD is Active. (At H, tuner is fundamentally not operated.)
32	—	—	Not used.
33	GND	—	Microcomputer GND
34	X1	—	Crystal connection pin for Main•clock oscillator.
35	X2	—	Crystal connection pin for Main•clock oscillator.
36	VIDEO. LED	O	VIDEO function LED
37	TAPE. LED	O	Tape function LED
38	CD. LED	O	CD function LED
39	TUNER. LED	O	Tuner function LED
40	PHONO. LED	O	Phono function LED
41	EQ. C	O	Preset•equalizer control
42	EQ. B	O	Preset•equalizer control
43	EQ. A	O	Preset•equalizer control
44	HOLD	I	Power cut detection pin (Normally : H, AC no connect : L)

Pin No.	Pin Name	I/O	Pin Description
45	CD. CLOCK	I	CD display data clock
46	SIRCS IN	I	SIRCS input
47	AUB. IN	I	AU BUS input
48	—	—	Connect to GND.
49	FUNCTION. C	—	Not used.
50	VOL. B	O	Volume control (VOL DOWN)
51	VOL. A	O	Volume control (VOL UP)
52	VDD	—	Microcomputer power (5V)
53	—	—	Not used.
54	DIODE. IN2	I	Distination•model discrimination input * 1
55	DIODE. IN1	I	Distination•model discrimination input * 1
56	S20	O	FL tube segment output
57	S19	O	FL tube segment output
58	S18	O	FL tube segment output
59	S17	O	Distination•model discrimination output * 1
60	S16	O	Distination•model discrimination output * 1
61	S15	O	FL tube segment output
62	S14	O	FL tube segment output
63	S13	O	FL tube segment output
64	S12	O	FL tube segment output
65	S11	O	FL tube segment output
66	S10	O	FL tube segment output
67	S9	O	FL tube segment output
68	S8	O	FL tube segment output
69	S7	O	FL tube segment output
70	S6	O	FL tube segment output
71	V. LOAD	—	Minus voltage for FL tube.
72	S5	O	FL tube segment output
73	S4	O	FL tube segment output
74	S3	O	FL tube segment output
75	S2	O	FL tube segment output
76	S1	O	FL tube segment output
77	S0	O	FL tube segment output
78	VOL. LED	O	Volume LED output
79	9G	O	FL tube digit output
80	8G	O	FL tube digit output

* 1

[DIODE MATRIX] (Pin No. is IC601's pin No.)

Output Input	Pin ^{⑥⑩}	Pin ^{⑤⑨}
Pin ^{⑤⑤}	A	×
Pin ^{⑥④}	B	○

× : Not use for diode.
○ : Use for diode.

[DISTINATION SELECT]

	E, AUS	EE
A	○	×
B	×	○

● Abbreviations

AUS : Australian model

EE : East European model

SECTION 6
EXPLODED VIEWS

NOTE:

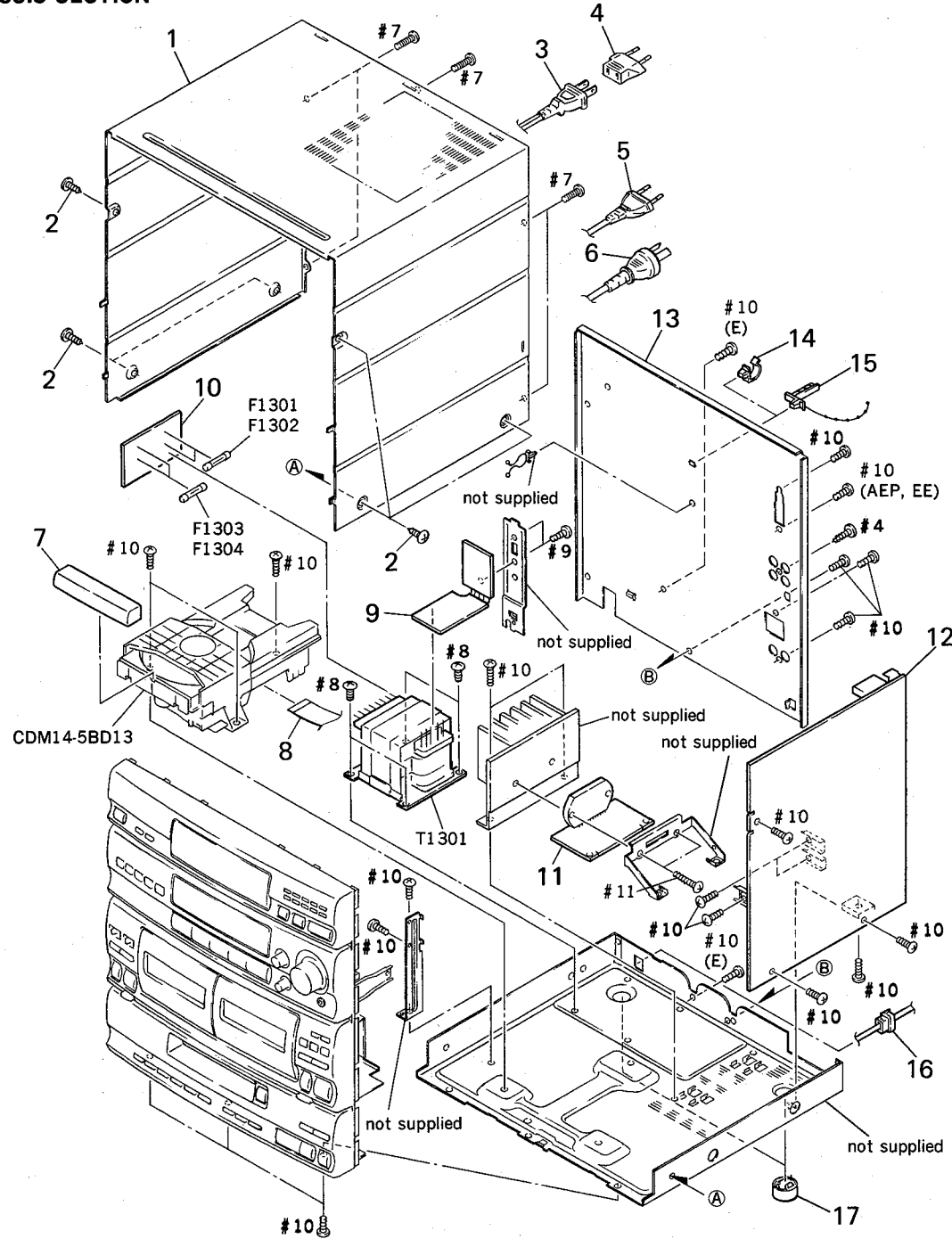
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Color Indication of Appearance Parts
Example :
KNOB, BALANCE (WHITE)... (RED)
↑ ↑
Parts Color Cabinet's Color

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

- Abbreviations
AEP1 : AEP unit with no PHONO POWER SOURCE (Made in Malaysia)
AEP2 : AEP unit with no PHONO POWER SOURCE (Made in Indonesia)
AEP3 : AEP unit with PHONO POWER SOURCE (Made in Indonesia)
EE : East European model
AUS : Australian model
E2 : AC 120V Area model
E3 : AC 240V Area model

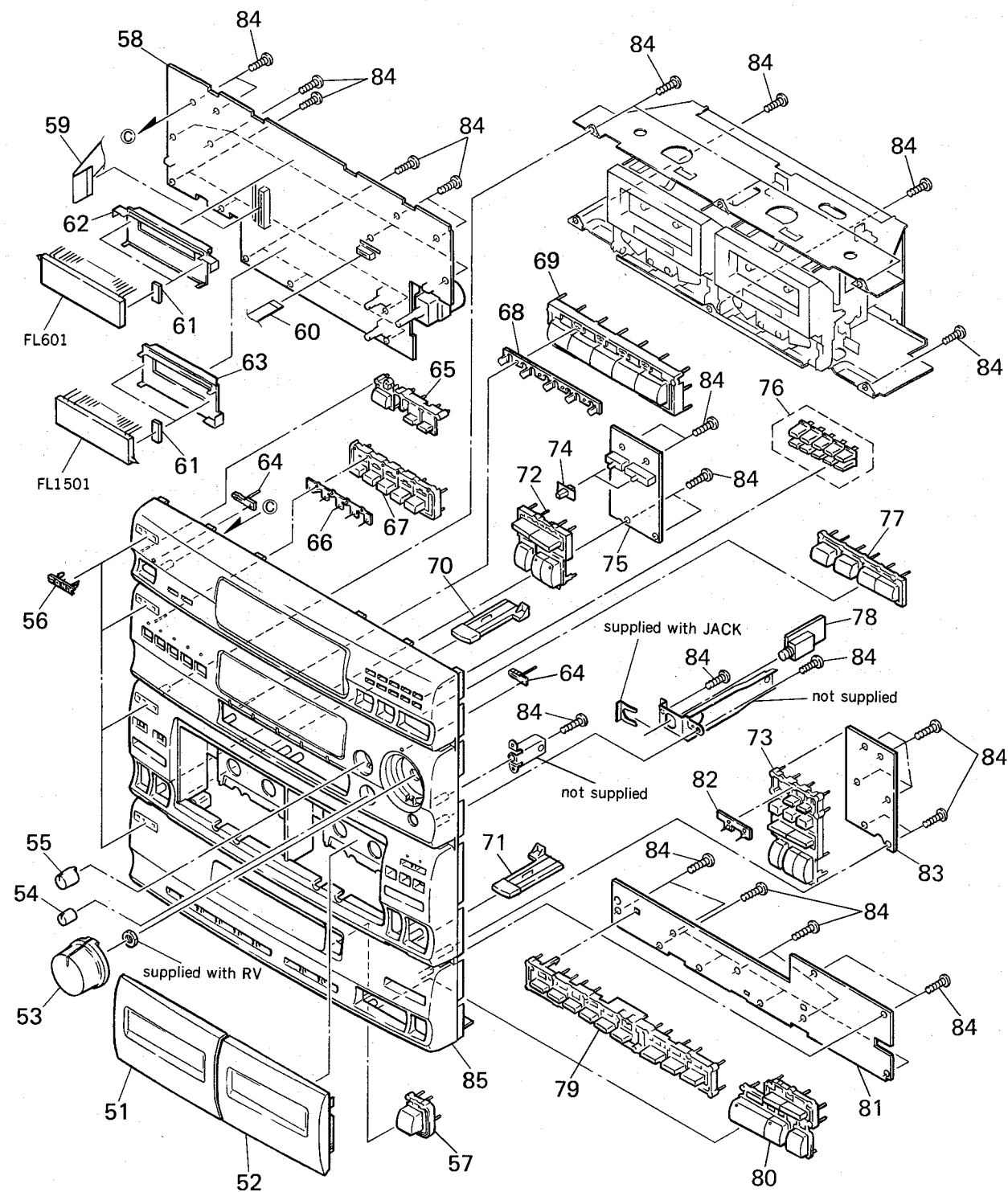
6-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
* 1	4-962-725-11	CASE	
2	3-363-099-01	SCREW (CASE 3 TP2)	
Δ 3	1-558-943-51	CORD, POWER (E)	
Δ 4	1-569-007-11	ADAPTOR, CONVERSION 2P (E3)	
Δ 5	1-575-651-11	CORD, POWER (AEP, EE)	
Δ 6	1-696-848-21	CORD, POWER (AUS)	
7	4-962-674-01	PANEL, LOADING	
8	1-765-176-11	WIRE (FLAT TYPE) (26 CORE)	
* 9	1-650-840-12	POWER SUPPLY (A) BOARD	
* 10	1-650-841-12	POWER SUPPLY (B) BOARD	
* 11	A-4365-948-A	POWER AMPLIFIER BOARD, COMPLETE (AEP2, AEP3, EE)	
* 11	A-4365-954-A	POWER AMPLIFIER BOARD, COMPLETE (E, AUS)	
* 11	A-4371-100-A	POWER AMPLIFIER BOARD, COMPLETE (AEP1)	
* 12	A-4365-949-A	MAIN BOARD, COMPLETE (AEP3)	
* 12	A-4369-081-A	MAIN BOARD, COMPLETE (AEP2)	
* 12	A-4369-092-A	MAIN BOARD, COMPLETE (EE)	
* 12	A-4369-594-A	MAIN BOARD, COMPLETE (E2)	
* 12	A-4371-104-A	MAIN BOARD, COMPLETE (E3, AUS)	
* 12	A-4371-101-A	MAIN BOARD, COMPLETE (AEP1)	

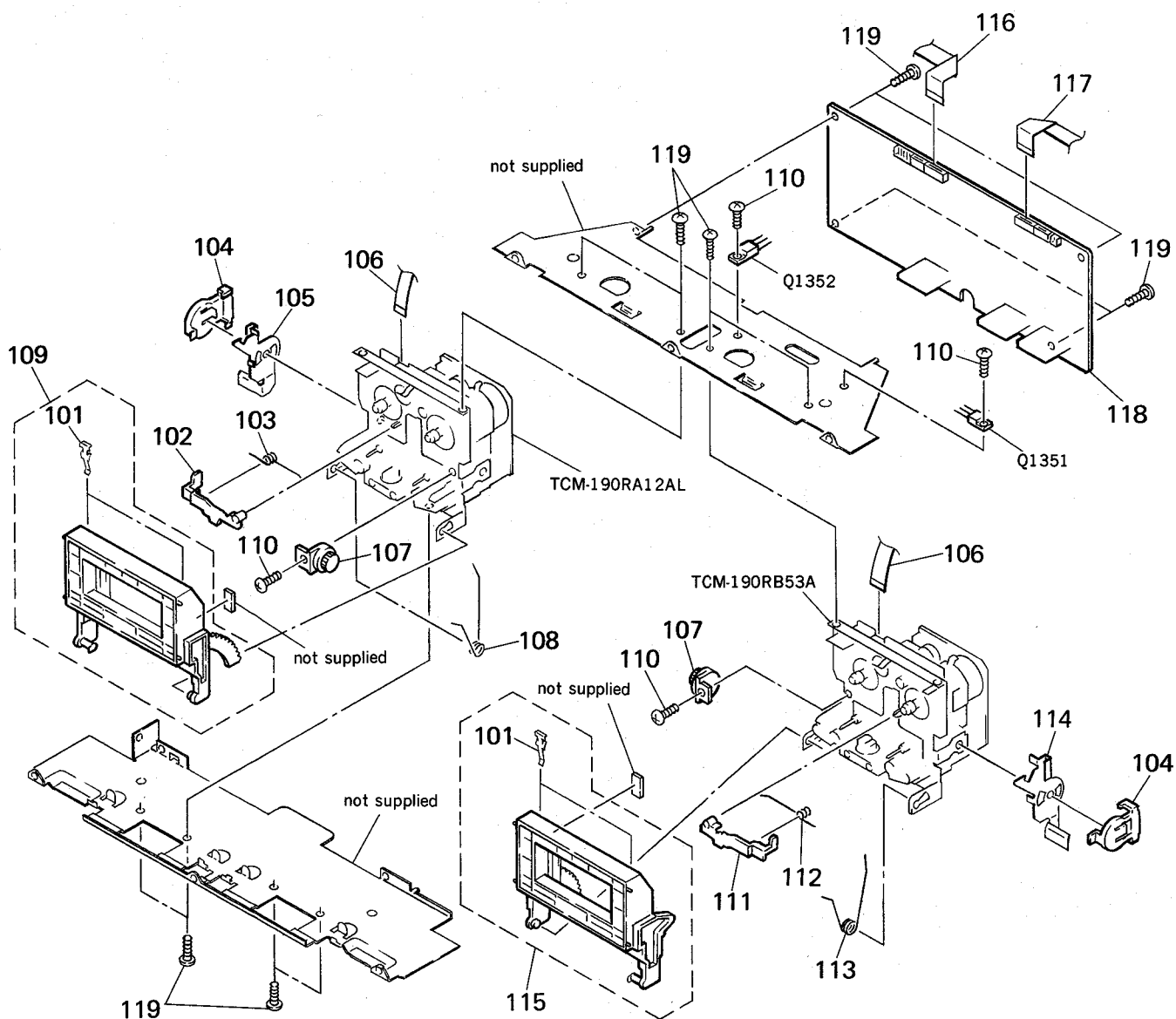
Ref. No.	Part No.	Description	Remark
* 13	4-962-742-11	PANEL, BACK (AEP2)	
* 13	4-962-742-21	PANEL, BACK (AEP3)	
* 13	4-962-742-61	PANEL, BACK (EE)	
* 13	4-962-742-71	PANEL, BACK (AEP1)	
* 13	4-962-743-41	PANEL, BACK (E2)	
* 13	4-962-743-51	PANEL, BACK (E3)	
* 13	4-962-743-61	PANEL, BACK (AUS)	
* 14	4-949-235-01	HOOK	
15	4-956-370-12	BAND, PLUG FIXED (AUS)	
* 16	3-703-244-00	BUSHING (2104), CORD (EXCEPT E)	
16	3-703-571-11	BUSHING (S) (4516), CORD (E)	
17	X-4941-228-1	FOOT ASSY	
Δ F1301	1-532-350-00	FUSE (4A/125V)	
Δ F1302	1-532-350-00	FUSE (4A/125V)	
Δ F1303	1-532-286-00	FUSE (2.5A)	
Δ F1304	1-532-286-00	FUSE (2.5A)	
Δ T1301	1-423-925-11	TRANSFORMER, POWER (AEP, EE)	
Δ T1301	1-423-926-11	TRANSFORMER, POWER (E, AUS)	

6-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	A-4353-833-A	LID (A) ASSY, CASSETTE		68	4-962-680-01	INDICATOR (FU)	
52	A-4353-834-A	LID (B) ASSY, CASSETTE		69	4-962-681-01	BUTTON (FU)	
53	4-955-635-02	KNOB (V)		70	4-962-709-01	BUTTON (EJECT) (L)	
54	4-955-744-01	KNOB (BA)		71	4-962-710-01	BUTTON (EJECT) (R)	
55	4-962-703-01	KNOB (SUR)		72	X-4944-378-1	DECK ASSY, BUTTON (A)	
56	4-962-708-11	EMBLEM (4-A), SONY		73	X-4944-379-1	DECK ASSY, BUTTON (B)	
57	4-962-665-01	BUTTON (OPEN)		74	4-962-707-01	KNOB, SLIDE	
* 58	A-4365-945-A	PANEL BOARD, COMPLETE (AEP2, AEP3)		* 75	1-650-780-11	PANEL (A) BOARD	
* 58	A-4369-090-A	PANEL BOARD, COMPLETE (EE)		76	4-962-676-01	BUTTON (PRESET)	
* 58	A-4369-592-A	PANEL BOARD, COMPLETE (E, AUS)		77	4-962-661-01	BUTTON (BAND)	
* 58	A-4371-095-A	PANEL BOARD, COMPLETE (AEP1)		* 78	1-650-426-11	H. P. BOARD	
59	1-751-747-11	WIRE (FLAT TYPE) (23 CORE)		79	4-962-666-01	BUTTON (PROGRAM)	
60	1-590-459-11	WIRE, FLAT TYPE (11 CORE)		80	X-4944-275-1	BUTTON (CD) ASSY	
* 61	4-949-935-21	CUSHION (FL)		* 81	1-650-425-11	CD PANEL BOARD	
* 62	4-942-301-01	HOLDER, FL TUBE		82	4-962-766-01	INDICATOR (DUB)	
* 63	4-962-699-01	HOLDER, FL TUBE		* 83	1-650-781-11	PANEL (B) BOARD	
64	4-962-682-01	INDICATOR (VO)		84	4-951-620-01	SCREW (2.6X8), +BVTP	
65	4-962-688-01	BUTTON (POWER)		85	X-4944-676-1	PANEL ASSY, FRONT	
66	4-962-677-01	INDICATOR (SELECT 5)		FL601	1-517-258-11	INDICATOR TUBE, FLUORESCENT	
67	4-962-678-01	BUTTON (SELECT 5)		FL1501	1-517-260-11	INDICATOR TUBE, FLUORESCENT	

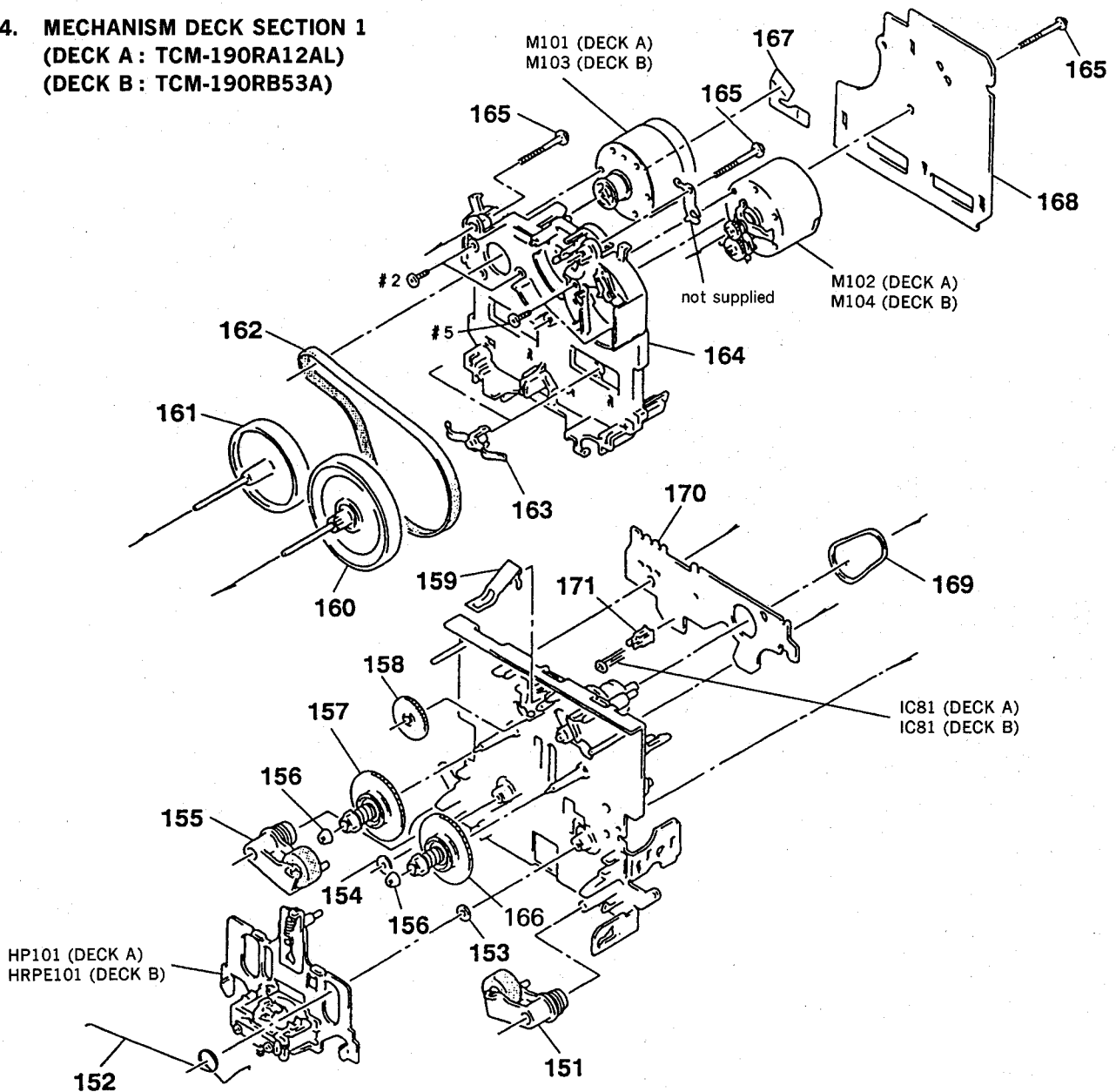
6-3. MECHANISM DECK BRACKET SECTION



Ref. No.	Part No.	Description	Remark
101	3-308-823-11	DETENT, CASSETTE	
102	3-354-955-01	LEVER (EJECT SAFTY LEVER L)	
103	3-354-961-01	SPRING (EJECT SAFTY SPRING L)	
104	3-354-957-01	JOINT (LOCK LEVER)	
* 105	3-354-953-01	LEVER (LOCK LEVER L)	
106	1-590-485-11	WIRE, FLAT TYPE (7 CORE)	
107	3-354-963-01	DAMPER	
108	3-354-959-01	SPRING (LOADING L), TORSION	
109	A-4325-163-A	HOLDER (L) ASSY, CASSETTE	
110	4-951-620-01	SCREW (2.6X8), +BVTP	
111	3-354-956-01	LEVER (EJECT SAFTY LEVER R)	

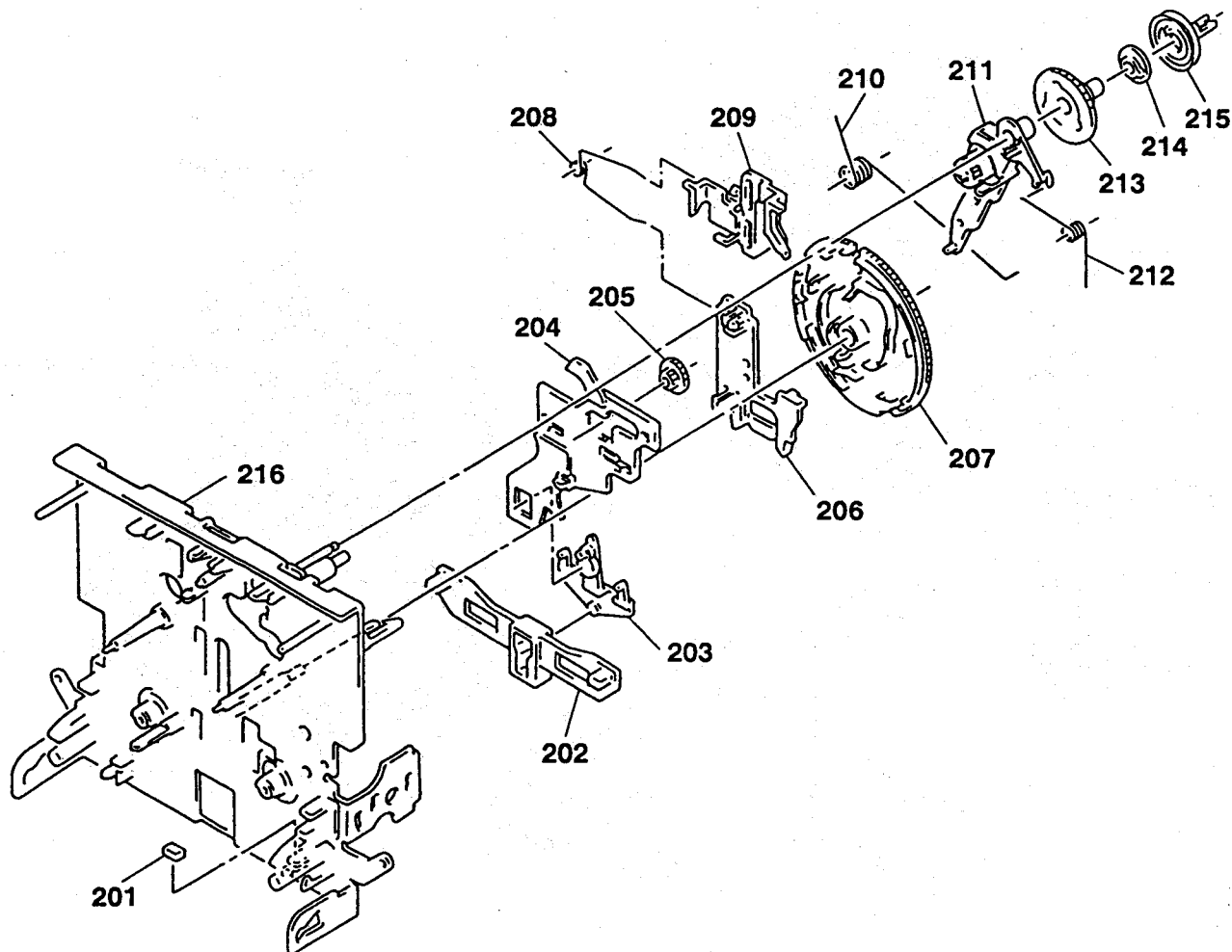
Ref. No.	Part No.	Description	Remark
112	3-354-962-01	SPRING (EJECT SAFTY SPRING R)	
113	3-354-960-01	SPRING (LOADING R), TORSION	
* 114	3-354-954-01	LEVER (LOCK LEVER R)	
115	A-4325-164-A	HOLDER (R) ASSY, CASSETTE	
116	1-751-025-11	WIRE (FLAT TYPE) (9 CORE)	
117	1-751-210-11	WIRE (FLAT TYPE) (13 CORE)	
* 118	A-4369-922-A	MAIN TC BOARD, COMPLETE	
119	4-928-635-01	SCREW, +BV (2.6X8) TAPPING	
Q1351	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q1352	8-729-209-15	TRANSISTOR 2SD2012	

6-4. MECHANISM DECK SECTION 1
(DECK A: TCM-190RA12AL)
(DECK B: TCM-190RB53A)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	X-3366-047-1	LEVER (PINCH F) ASSY		167	1-638-983-11	MOTOR FLEXIBLE BOARD	
152	3-907-362-01	SPRING, TORSION		* 168	A-2006-623-A	AUDIO (MD-AXM) BOARD, COMPLETE (DECK A)	
153	3-356-713-01	WASHER		* 168	A-2007-134-A	AUDIO (MD-ICD) BOARD, COMPLETE (DECK B)	
154	3-356-714-01	WASHER		169	3-359-466-01	BELT (FR), SQUARE	
155	X-3366-048-1	LEVER (PINCH R) ASSY		* 170	1-638-020-11	LEAF SW (A) BOARD (DECK A)	
156	3-913-841-01	CAP (REEL)		* 170	1-638-020-11	LEAF SW (B) BOARD (DECK B)	
157	X-3366-971-1	TABLE ASSY (B), REEL		171	3-343-419-01	HOLDER (S SENSOR A)	
158	3-359-424-01	GEAR (REV GEAR)		HP101	A-2003-757-A	BASE ASSY, HEAD (DECK A)	
159	3-359-430-01	SPRING (CASSETTE RETAINER), LEAF		HRPE101	A-2003-930-A	BASE ASSY, HEAD (DECK B)	
160	X-3367-629-1	FLYWHEEL (FWD) ASSY		IC81	8-749-924-10	PHOTO REFLECTOR NJL5165K-B (H1) (DECK A)	
161	X-3367-630-2	FLYWHEEL (REV) ASSY		IC81	8-749-924-10	PHOTO REFLECTOR NJL5165K-B (H1) (DECK B)	
162	3-359-417-01	BELT (FLAT), CAPSTAN		M101	X-3365-377-1	MOTOR ASSY (CAPSTAN) (DECK A)	
163	3-575-321-00	RETAINER, THRUST, CAPSTAN		M102	X-3363-501-1	MOTOR ASSY (REEL) (DECK A)	
164	3-359-436-11	BASE (THRUST RETAINER), FITTING		M103	X-3365-377-1	MOTOR ASSY (CAPSTAN) (DECK B)	
165	3-359-414-01	SCREW (*PTPWH 2X23)		M104	X-3363-501-1	MOTOR ASSY (REEL) (DECK B)	
166	X-3366-970-1	TABLE ASSY, REEL					

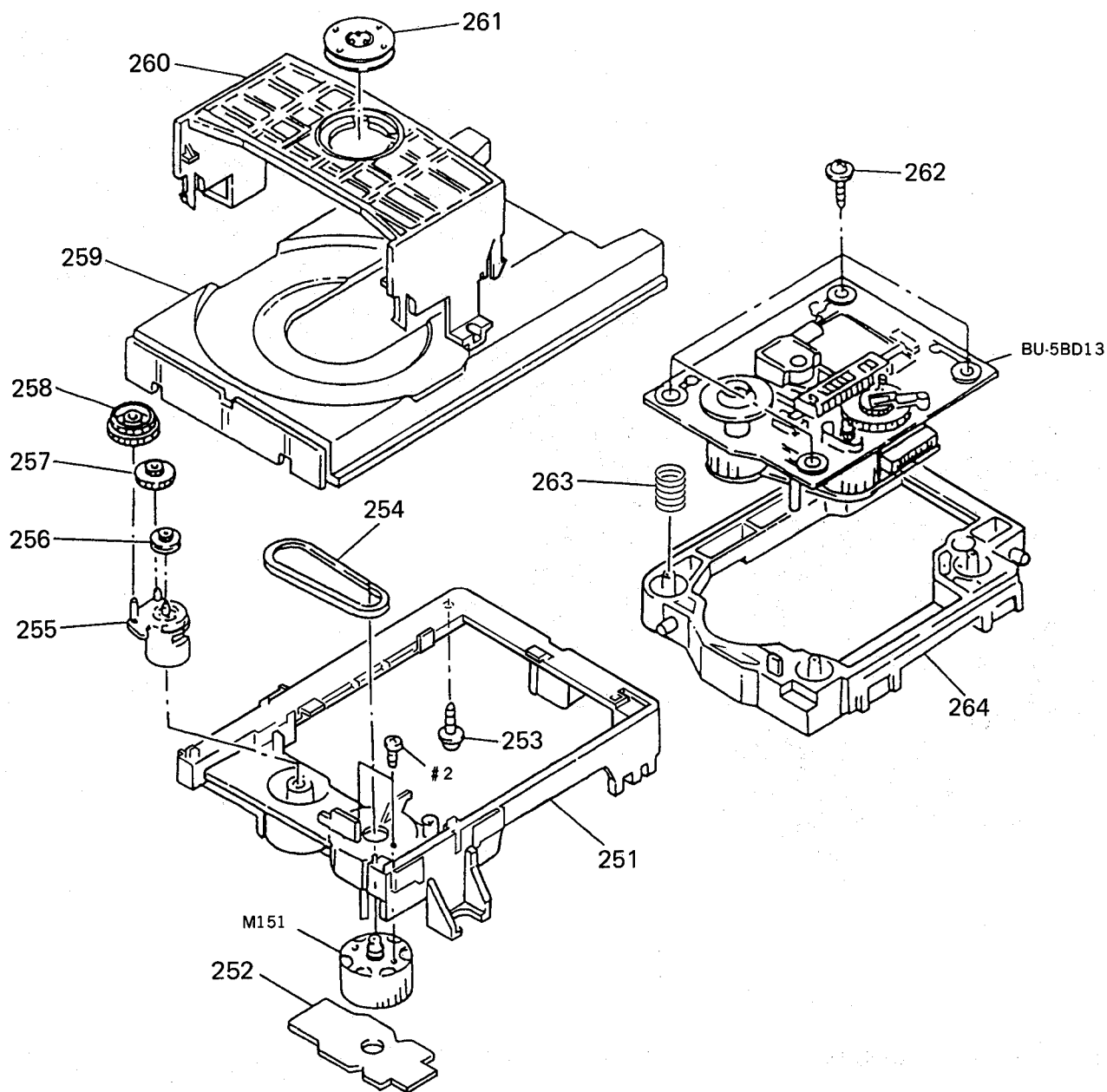
6-5. MECHANISM DECK SECTION 2
(DECK A : TCM-190RA12AL)
(DECK B : TCM-190RB53A)



Ref. No.	Part No.	Description	Remark
201	3-359-469-01	SPACER	
* 202	3-359-425-01	SLIDER (REVERSE SLIDER)	
203	3-359-426-01	LEVER (REVERSE LEVER)	
* 204	3-359-415-01	SLIDER (TRIGGER SLIDER) (DECK A)	
204	3-359-415-11	SLIDER (TRIGGER SLIDER) (DECK B)	
205	3-359-448-01	GEAR (TRIGGER)	
* 206	3-359-427-01	SLIDER (REVERSE SLIDER)	
207	3-359-420-01	GEAR (CAM GEAR)	
208	3-359-454-01	SPRING, TORSION	
209	3-359-429-01	SLIDER (BRAKE PLATE) (DECK A)	
209	3-359-429-11	SLIDER (BRAKE PLATE) (DECK B)	

Ref. No.	Part No.	Description	Remark
210	3-359-456-01	SPRING (TRIGGER SPRING), TORSION	
211	X-3366-569-1	ARM ASSY, FR	
212	3-359-453-01	SPRING (FR ARM), TORSION	
213	3-359-419-11	GEAR (FR GEAR)	
214	3-359-421-11	CLUTCH (REEL DISK)	
215	3-359-418-11	PULLEY (FR PULLEY)	
216	X-3359-415-1	CHASSIS ASSY, MECHANICAL (DECK A)	
216	X-3363-790-1	CHASSIS ASSY, MECHANICAL (DECK B)	

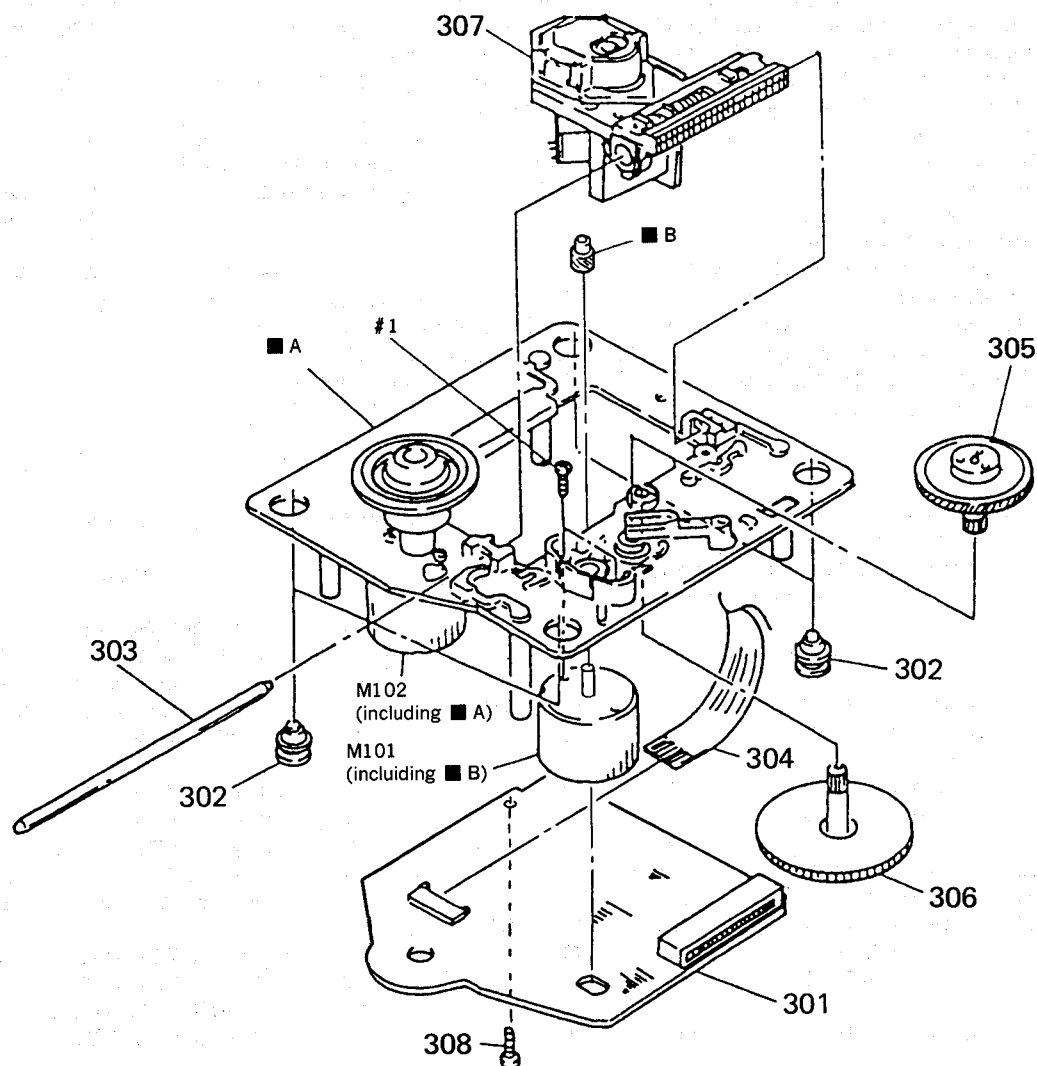
6-6. CD MECHANISM SECTION (CDM14-5BD13)



Ref. No.	Part No.	Description	Remark
251	4-933-111-01	CHASSIS (MD)	
252	1-645-721-11	LOADING BOARD	
* 253	4-917-583-21	BRACKET, YOKE	
254	4-927-649-01	BELT	
255	4-933-109-01	CAM	
256	4-927-651-01	PULLEY (S)	
257	4-927-628-01	GEAR (C)	
258	4-933-107-01	GEAR (PL)	

Ref. No.	Part No.	Description	Remark
259	4-933-112-01	TABLE, DISC	
260	4-933-110-01	HOLDER (MG)	
* 261	1-452-538-11	MAGNET	
262	4-933-134-01	SCREW (+PTPWH M2. 6X6)	
263	4-959-996-01	SPRING (932), COMPRESSION	
264	4-933-129-01	HOLDER (BU)	
M151	A-4604-363-A	MOTOR (L) ASSY	

6-7. OPTICAL PICK-UP BLOCK (BU-5BD13)



The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
* 301	A-4673-064-A	BD BOARD, COMPLETE	
302	4-951-940-01	INSULATOR (BU)	
303	4-917-565-01	SHAFT, SLED	
304	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
305	4-917-567-01	GEAR (M)	

Ref. No.	Part No.	Description	Remark
306	4-917-564-01	GEAR (P), FLATNESS	
Δ 307	8-848-144-11	DEVICE, OPTICAL KSS-240A	
308	4-951-620-01	SCREW (2.6X8), +BVTP	
M101	X-4917-504-1	MOTOR ASSY (SLED)	
M102	X-4917-523-4	MOTOR ASSY (SPINDLE)	

SECTION 7 ELECTRICAL PARTS LIST

AUDIO (MD-AXM)

AUDIO (MD-ICD)

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

● SEMICONDUCTORS

In each case, u: μ , for example:

uA...: μ A.. uPA...: μ PA..
uPB...: μ PB.. uPC...: μ PC.. uPD...: μ PD..

● CAPACITORS

uF: μ F

● COILS

uH: μ H

When indicating parts by reference number, please include the board.

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

● Abbreviations

AEP1 : AEP unit with no PHONO POWER SOURCE (Made in Malaysia)
AEP2 : AEP unit with no PHONO POWER SOURCE (Made in Indonesia)
AEP3 : AEP unit with PHONO POWER SOURCE (Made in Indonesia)
EE : East European model
AUS : Australian model
E2 : AC 120V Area model
E3 : AC 240V Area model

Ref. No.	Part No.	Description	Remark
*	A-2006-623-A	AUDIO (MD-AXM) BOARD, COMPLETE *****	
		< CAPACITOR >	
C11	1-163-131-00	CERAMIC CHIP 390PF 5% 50V	
C12	1-136-157-00	FILM 0.022uF 5% 50V	
C13	1-124-234-00	ELECT 22uF 20% 16V	
C18	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C21	1-163-131-00	CERAMIC CHIP 390PF 5% 50V	
C22	1-136-157-00	FILM 0.022uF 5% 50V	
C23	1-124-234-00	ELECT 22uF 20% 16V	
C28	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C31	1-124-234-00	ELECT 22uF 20% 16V	
C32	1-124-234-00	ELECT 22uF 20% 16V	
C72	1-124-499-11	NONPOLAR 1uF 20% 50V	
		< CONNECTOR >	
* CNJ31	1-580-782-11	CONNECTOR, BOARD TO BOARD	
* CNJ72	1-580-411-11	SOCKET, CONNECTOR 4P	
* CNP32	1-580-772-11	PIN, CONNECTOR (PC BOARD) 4P	
* CNP71	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P	

< IC >

IC31 8-759-106-02 IC uPC4570G2

< JUMPER RESISTOR >

JW1 1-216-295-00 METAL CHIP 0 5% 1/10W
JW51 1-216-296-00 METAL GLAZE 0 5% 1/8W
JW52 1-216-296-00 METAL GLAZE 0 5% 1/8W
JW53 1-216-296-00 METAL GLAZE 0 5% 1/8W
JW54 1-216-296-00 METAL GLAZE 0 5% 1/8W

< TRANSISTOR >

Q71 8-729-216-22 TRANSISTOR 2SA1162-G

Ref. No.	Part No.	Description	Remark
		< RESISTOR >	
R11	1-216-099-00	METAL CHIP 120K 5% 1/10W	
R12	1-216-025-00	METAL CHIP 100 5% 1/10W	
R13	1-216-100-00	METAL GLAZE 130K 5% 1/10W	
R14	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R21	1-216-099-00	METAL CHIP 120K 5% 1/10W	
R22	1-216-025-00	METAL CHIP 100 5% 1/10W	
R23	1-216-100-00	METAL GLAZE 130K 5% 1/10W	
R24	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R31	1-216-033-00	METAL CHIP 220 5% 1/10W	
R32	1-216-033-00	METAL CHIP 220 5% 1/10W	
R71	1-216-082-00	METAL GLAZE 24K 5% 1/10W	
R72	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R73	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
R74	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
		< VARIABLE RESISTOR >	
RV11	1-241-761-11	RES, ADJ, CARBON 1K	
RV21	1-241-761-11	RES, ADJ, CARBON 1K	
RV71	1-241-630-11	RES, ADJ, CARBON 10K	
RV72	1-241-630-11	RES, ADJ, CARBON 10K	

* A-2007-134-A AUDIO (MD-ICD) BOARD, COMPLETE

< CAPACITOR >

C11 1-163-131-00 CERAMIC CHIP 390PF 5% 50V
C12 1-163-117-00 CERAMIC CHIP 100PF 5% 50V
C13 1-136-153-00 FILM 0.01uF 5% 50V
C14 1-126-177-11 ELECT 100uF 20% 10V
C15 1-124-234-00 ELECT 22uF 20% 16V
C16 1-136-273-91 FILM 75PF 5% 630V
C17 1-164-080-11 CERAMIC 390PF 10% 50V
C18 1-163-103-00 CERAMIC CHIP 27PF 5% 50V

AUDIO (MD-ICD)

Ref. No.	Part No.	Description	Remark
C21	1-163-131-00	CERAMIC CHIP 390PF	5% 50V
C22	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C23	1-136-153-00	FILM 0.01uF	5% 50V
C24	1-126-177-11	ELECT 100uF	20% 10V
C25	1-124-234-00	ELECT 22uF	20% 16V
C26	1-136-273-91	FILM 75PF	5% 630V
C27	1-164-080-11	CERAMIC 390PF	10% 50V
C28	1-163-103-00	CERAMIC CHIP 27PF	5% 50V
C31	1-124-234-00	ELECT 22uF	20% 16V
C32	1-124-234-00	ELECT 22uF	20% 16V
C33	1-124-234-00	ELECT 22uF	20% 16V
C51	1-163-019-00	CERAMIC CHIP 0.0068uF	10% 50V
C52	1-163-019-00	CERAMIC CHIP 0.0068uF	10% 50V
C53	1-163-022-00	CERAMIC CHIP 0.012uF	10% 50V
C54	1-136-559-11	FILM 0.0047uF	5% 630V
C56	1-164-505-11	CERAMIC CHIP 2.2uF	16V
C57	1-164-346-11	CERAMIC CHIP 1uF	16V
C58	1-163-024-00	CERAMIC CHIP 0.018uF	10% 50V
C72	1-124-499-11	NONPOLAR 1uF	20% 50V

< CONNECTOR >

* CNJ31	1-580-782-11	CONNECTOR, BOARD TO BOARD
* CNJ33	1-580-782-11	CONNECTOR, BOARD TO BOARD
* CNJ72	1-580-411-11	SOCKET, CONNECTOR 4P
* CNP32	1-580-781-11	PIN, CONNECTOR (PC BOARD) 7P
* CNP71	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P

< IC >

IC31	8-759-249-21	IC uPC1330GR-T1
IC32	8-759-106-02	IC uPC4570G2

< JUMPER RESISTOR >

JW1	1-216-295-00	METAL CHIP 0 5% 1/10W
JW2	1-216-295-00	METAL CHIP 0 5% 1/10W
JW11	1-216-296-00	METAL GLAZE 0 5% 1/8W
JW12	1-216-296-00	METAL GLAZE 0 5% 1/8W
JW13	1-216-296-00	METAL GLAZE 0 5% 1/8W
JW14	1-216-296-00	METAL GLAZE 0 5% 1/8W
JW15	1-216-296-00	METAL GLAZE 0 5% 1/8W
JW16	1-216-296-00	METAL GLAZE 0 5% 1/8W
JW17	1-216-296-00	METAL GLAZE 0 5% 1/8W
JW18	1-216-296-00	METAL GLAZE 0 5% 1/8W
JW19	1-216-296-00	METAL GLAZE 0 5% 1/8W
JW20	1-216-296-00	METAL GLAZE 0 5% 1/8W
JW21	1-216-296-00	METAL GLAZE 0 5% 1/8W
JW22	1-216-296-00	METAL GLAZE 0 5% 1/8W
JW23	1-216-296-00	METAL GLAZE 0 5% 1/8W
JW24	1-216-296-00	METAL GLAZE 0 5% 1/8W
JW25	1-216-296-00	METAL GLAZE 0 5% 1/8W

Ref. No.	Part No.	Description				Remark
JW26	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JW27	1-216-296-00	METAL GLAZE	0	5%	1/8W	

< COIL >

L11	1-410-780-11	INDUCTOR 27mH
L21	1-410-780-11	INDUCTOR 27mH

< TRANSISTOR >

Q51	8-729-011-92	TRANSISTOR 2SC2001TP-K1K2
Q52	8-729-011-92	TRANSISTOR 2SC2001TP-K1K2
Q53	8-729-111-29	TRANSISTOR 2SD1616A-K
Q71	8-729-216-22	TRANSISTOR 2SA1162-G

< RESISTOR >

R11	1-216-099-00	METAL CHIP 120K 5% 1/10W
R12	1-216-033-00	METAL CHIP 220 5% 1/10W
R13	1-216-081-00	METAL CHIP 22K 5% 1/10W
R14	1-216-075-00	METAL CHIP 12K 5% 1/10W
R15	1-216-107-00	METAL CHIP 270K 5% 1/10W
△R16	1-249-430-11	CARBON 12K 5% 1/4W F
R21	1-216-099-00	METAL CHIP 120K 5% 1/10W
R22	1-216-033-00	METAL CHIP 220 5% 1/10W
R23	1-216-081-00	METAL CHIP 22K 5% 1/10W
R24	1-216-075-00	METAL CHIP 12K 5% 1/10W
R25	1-216-107-00	METAL CHIP 270K 5% 1/10W
△R26	1-249-430-11	CARBON 12K 5% 1/4W F
R31	1-216-033-00	METAL CHIP 220 5% 1/10W
R32	1-216-033-00	METAL CHIP 220 5% 1/10W
R33	1-216-073-00	METAL CHIP 10K 5% 1/10W
△R41	1-249-393-11	CARBON 10 5% 1/4W F
△R42	1-249-393-11	CARBON 10 5% 1/4W F
R51	1-216-075-00	METAL CHIP 12K 5% 1/10W
R52	1-216-075-00	METAL CHIP 12K 5% 1/10W
R53	1-216-073-00	METAL CHIP 10K 5% 1/10W
R54	1-216-309-00	METAL CHIP 5.6 5% 1/10W
R55	1-216-309-00	METAL CHIP 5.6 5% 1/10W
R56	1-216-298-00	METAL CHIP 2.2 5% 1/10W
R71	1-216-082-00	METAL GLAZE 24K 5% 1/10W
R72	1-216-081-00	METAL CHIP 22K 5% 1/10W
R73	1-216-089-00	METAL GLAZE 47K 5% 1/10W
R74	1-216-089-00	METAL GLAZE 47K 5% 1/10W

< VARIABLE RESISTOR >

RV11	1-241-761-11	RES, ADJ, CARBON 1K
RV12	1-238-551-11	RES, ADJ, CARBON 220K
RV21	1-241-761-11	RES, ADJ, CARBON 1K
RV22	1-238-551-11	RES, ADJ, CARBON 220K
RV71	1-241-630-11	RES, ADJ, CARBON 10K

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

AUDIO (MD-ICD)

BD

Ref. No.	Part No.	Description	Remark
RV72	1-241-630-11	RES, ADJ, CARBON 10K	
		< COIL >	
T51	1-406-419-11	COIL, BIAS OSCILLATION	

*	A-4673-064-A	BD BOARD, COMPLETE	

		< CAPACITOR >	
C101	1-163-005-11	CERAMIC CHIP 470PF	10% 50V
C102	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C103	1-163-005-11	CERAMIC CHIP 470PF	10% 50V
C105	1-135-155-21	TANTALUM CHIP 4.7uF	10% 16V
C106	1-164-346-11	CERAMIC CHIP 1uF	16V
C107	1-164-505-11	CERAMIC CHIP 2.2uF	16V
C108	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C109	1-163-011-11	CERAMIC CHIP 0.0015uF	10% 50V
C110	1-163-017-00	CERAMIC CHIP 0.0047uF	5% 50V
C111	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C112	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C113	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C123	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C124	1-164-005-11	CERAMIC CHIP 0.47uF	25V
C131	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C132	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C133	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C153	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C159	1-163-019-00	CERAMIC CHIP 0.0068uF	10% 50V
C161	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C177	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C178	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C179	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C181	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C182	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C183	1-135-156-21	TANTALUM CHIP 6.8uF	10% 10V
C184	1-135-156-21	TANTALUM CHIP 6.8uF	10% 10V
C185	1-135-156-21	TANTALUM CHIP 6.8uF	10% 10V
C186	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C187	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C188	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C191	1-163-091-00	CERAMIC CHIP 8PF	50V
C192	1-163-091-00	CERAMIC CHIP 8PF	50V
C193	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C194	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C195	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C196	1-163-005-11	CERAMIC CHIP 470PF	10% 50V
C197	1-163-038-00	CERAMIC CHIP 0.1uF	25V

Ref. No.	Part No.	Description	Remark
		< CONNECTOR >	
* CN101	1-580-875-11	SOCKET, CONNECTOR (SMT) 26P	
CN102	1-580-866-11	SOCKET, CONNECTOR (SMT) 12P	
		< IC >	
IC101	8-752-367-16	IC CXD2515Q-1	
IC102	8-759-176-09	IC BA6392FP	
IC103	8-752-360-60	IC CXD2565M-1	
		< COIL >	
L101	1-414-234-11	INDUCTOR, FERRITE BEAD	
L102	1-414-234-11	INDUCTOR, FERRITE BEAD	
L103	1-414-234-11	INDUCTOR, FERRITE BEAD	
L104	1-216-001-00	METAL CHIP 10	5% 1/10W
L105	1-216-295-00	METAL CHIP 0	5% 1/10W
L106	1-414-234-11	INDUCTOR, FERRITE BEAD	
L107	1-216-295-00	METAL CHIP 0	5% 1/10W
L108	1-216-295-00	METAL CHIP 0	5% 1/10W
		< RESISTOR >	
R101	1-216-077-00	METAL CHIP 15K	5% 1/10W
R102	1-216-097-00	METAL CHIP 100K	5% 1/10W
R103	1-216-077-00	METAL CHIP 15K	5% 1/10W
R104	1-216-085-00	METAL CHIP 33K	5% 1/10W
R105	1-216-065-00	METAL CHIP 4.7K	5% 1/10W
R106	1-216-061-00	METAL CHIP 3.3K	5% 1/10W
R107	1-216-061-00	METAL CHIP 3.3K	5% 1/10W
R108	1-216-073-00	METAL CHIP 10K	5% 1/10W
R109	1-216-121-00	METAL CHIP 1M	5% 1/10W
R110	1-216-025-00	METAL CHIP 100	5% 1/10W
R112	1-216-049-00	METAL CHIP 1K	5% 1/10W
R122	1-216-295-00	METAL CHIP 0	5% 1/10W
R123	1-216-073-00	METAL CHIP 10K	5% 1/10W
R124	1-216-097-00	METAL CHIP 100K	5% 1/10W
R125	1-216-049-00	METAL CHIP 1K	5% 1/10W
R126	1-216-049-00	METAL CHIP 1K	5% 1/10W
R127	1-216-049-00	METAL CHIP 1K	5% 1/10W
R131	1-216-037-00	METAL CHIP 330	5% 1/10W
R158	1-216-111-00	METAL CHIP 390K	5% 1/10W
R159	1-216-101-00	METAL CHIP 150K	5% 1/10W
R181	1-216-053-00	METAL CHIP 1.5K	5% 1/10W
R182	1-216-080-00	METAL CHIP 20K	5% 1/10W
R183	1-216-080-00	METAL CHIP 20K	5% 1/10W
R184	1-216-080-00	METAL CHIP 20K	5% 1/10W
R185	1-216-080-00	METAL CHIP 20K	5% 1/10W
R187	1-216-035-00	METAL CHIP 270	5% 1/10W
R188	1-216-121-00	METAL CHIP 1M	5% 1/10W
R189	1-414-234-11	INDUCTOR, FERRITE BEAD	

BD**CD PANEL****H. P.****LEAF SW (A)****LEAF SW (B)**

Ref. No.	Part No.	Description	Remark
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< SWITCH >

S101	1-572-085-11	SWITCH, LEAF (LIMIT)	
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< VIBRATOR >

X101	1-579-904-11	VIBRATOR, CRYSTAL (33.8MHz)	
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*	1-650-425-11	CD PANEL BOARD	
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< DIODE >

D201	8-719-046-38	LED SEL5821A-TH8C (II)	
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D202	8-719-046-42	LED SEL5421E-TH8C (D)	
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< TRANSISTOR >

Q201	8-729-900-89	TRANSISTOR DTC144ES	
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Q202	8-729-900-89	TRANSISTOR DTC144ES	
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< RESISTOR >

R201	1-249-411-11	CARBON	330 5% 1/4W
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R202	1-249-409-11	CARBON	220 5% 1/4W
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R203	1-249-417-11	CARBON	1K 5% 1/4W
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R204	1-249-418-11	CARBON	1.2K 5% 1/4W
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R205	1-249-418-11	CARBON	1.2K 5% 1/4W
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R206	1-249-417-11	CARBON	1K 5% 1/4W
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R207	1-249-418-11	CARBON	1.2K 5% 1/4W
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R208	1-249-418-11	CARBON	1.2K 5% 1/4W
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R209	1-249-419-11	CARBON	1.5K 5% 1/4W
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R210	1-249-417-11	CARBON	1K 5% 1/4W
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R211	1-249-418-11	CARBON	1.2K 5% 1/4W
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R212	1-249-418-11	CARBON	1.2K 5% 1/4W
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R213	1-249-419-11	CARBON	1.5K 5% 1/4W
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R214	1-249-420-11	CARBON	1.8K 5% 1/4W
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< SWITCH >

S201	1-554-303-21	SWITCH, TACTILE (■)	
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S202	1-554-303-21	SWITCH, TACTILE (▷)	
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S203	1-554-303-21	SWITCH, TACTILE (II)	
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S204	1-554-303-21	SWITCH, TACTILE (▷▷▷)	
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S205	1-554-303-21	SWITCH, TACTILE (⊕ OPEN/CLOSE)	
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S206	1-554-303-21	SWITCH, TACTILE (K4 ◀◀)	
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S207	1-554-303-21	SWITCH, TACTILE (PROGRAM (PLAY MODE))	
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S208	1-554-303-21	SWITCH, TACTILE (REPEAT)	
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S209	1-554-303-21	SWITCH, TACTILE (EDIT)	
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S210	1-554-303-21	SWITCH, TACTILE (CONTINUE (PLAY MODE))	
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S211	1-554-303-21	SWITCH, TACTILE (SHUFFLE (PLAY MODE))	
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S212	1-554-303-21	SWITCH, TACTILE (TIME)	
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S213	1-554-303-21	SWITCH, TACTILE (CLEAR)	
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Ref. No.	Part No.	Description	Remark
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S214	1-554-303-21	SWITCH, TACTILE (CHECK)	
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S215	1-554-303-21	SWITCH, TACTILE (MUSIC SCAN)	
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*	1-650-426-11	H. P. BOARD	
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< JACK >

J1201	1-569-113-11	JACK, LARGE TYPE (HEADPHONES)	
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< CAPACITOR >

C1237	1-162-282-31	CERAMIC	100PF 10% 50V
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C1238	1-162-282-31	CERAMIC	100PF 10% 50V
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*	1-638-020-11	LEAF SW (A) BOARD	
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< CONNECTOR >

* CNP81	1-568-850-11	SOCKET, CONNECTOR 7P	
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< IC >

IC81	8-749-924-10	PHOTO REFLECTOR	NJL5165K-B(H1)
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< RESISTOR >

R84	1-249-417-11	CARBON	1K 5% 1/4W
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R85	1-249-408-11	CARBON	180 5% 1/4W
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< SWITCH >

S81	1-571-958-11	SWITCH, PUSH (1 KEY) (STOP DET)	
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S82	1-571-281-21	SWITCH, LEAF (CRO2 DET)	
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S86	1-571-281-21	SWITCH, LEAF (HALF DET)	
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*	1-638-020-11	LEAF SW (B) BOARD	
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< CONNECTOR >

* CNP81	1-568-850-11	SOCKET, CONNECTOR 7P	
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< PHOTO REFLECTOR >

IC81	8-749-924-10	PHOTO REFLECTOR	NJL5165K-B(H1)
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< RESISTOR >

R81	1-249-414-11	CARBON	560 5% 1/4W
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R82	1-247-818-11	CARBON	300 5% 1/4W
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R83	1-247-834-11	CARBON	1.3K 5% 1/4W
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R84	1-249-417-11	CARBON	1K 5% 1/4W
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R85	1-249-408-11	CARBON	180 5% 1/4W
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LEAF SW (B)

LOADING

MAIN

Ref.No.	Part No.	Description	Remark
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< SWITCH >

S81	1-571-958-11	SWITCH, PUSH (1 KEY) (STOP DET)	
S82	1-571-281-21	SWITCH, LEAF (CrO2 DET)	
S84	1-571-281-21	SWITCH, LEAF (ERASE PROOF (SIDE A))	
S85	1-571-281-21	SWITCH, LEAF (ERASE PROOF (SIDE B))	
S86	1-571-281-21	SWITCH, LEAF (HALF DET)	

*	1-645-721-11	LOADING BOARD	
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< CONNECTOR >

* CN151	1-568-943-11	PIN, CONNECTOR 5P	
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< SWITCH >

S151	1-572-086-11	SWITCH, LEAF (LOAD OUT)	
S152	1-572-086-11	SWITCH, LEAF (LOAD IN)	

*	A-4365-949-A	MAIN BOARD, COMPLETE (AEP3)	
*	A-4369-081-A	MAIN BOARD, COMPLETE (AEP2)	
*	A-4369-092-A	MAIN BOARD, COMPLETE (EE)	
*	A-4369-594-A	MAIN BOARD, COMPLETE (E2)	
*	A-4371-101-A	MAIN BOARD, COMPLETE (AEP1)	
*	A-4371-104-A	MAIN BOARD, COMPLETE (E3, AUS)	

4-352-844-01	PIN, LEAD, COATING (AEP, EE)	
7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
7-682-547-09	SCREW +BVTT 3X6 (S)	

< CAPACITOR >

C1	1-161-379-00	CERAMIC	0.01uF	20%	25V
C2	1-124-477-11	ELECT	47uF	20%	25V
C3	1-161-379-00	CERAMIC	0.01uF	20%	25V
C4	1-161-379-00	CERAMIC	0.01uF	20%	25V
		(EXCEPT AEP1, EE)			
C4	1-164-159-11	CERAMIC	0.1uF		50V
		(AEP1, EE)			
C5	1-164-159-11	CERAMIC	0.1uF		50V
C6	1-161-379-00	CERAMIC	0.01uF	20%	25V
		(EXCEPT EE)			
C6	1-161-494-00	CERAMIC	0.022uF		25V
		(EE)			
C7	1-124-477-11	ELECT	47uF	20%	25V
		(AEP1, EE)			
C7	1-126-934-11	ELECT	220uF	20%	16V
		(EXCEPT AEP1, EE)			
C8	1-161-379-00	CERAMIC	0.01uF	20%	25V
C9	1-161-379-00	CERAMIC	0.01uF	20%	25V
C10	1-161-379-00	CERAMIC	0.01uF	20%	25V

Ref.No.	Part No.	Description	Remark
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C11	1-124-907-11	ELECT	10uF	20%	50V
C12	1-124-902-00	ELECT	0.47uF	20%	50V
C13	1-124-903-11	ELECT	1uF	20%	50V
C14	1-124-903-11	ELECT	1uF	20%	50V
C15	1-124-907-11	ELECT	10uF	20%	50V
C16	1-124-907-11	ELECT	10uF	20%	50V
C17	1-124-907-11	ELECT	10uF	20%	50V
C18	1-124-907-11	ELECT	10uF	20%	50V
C19	1-136-158-00	FILM	0.027uF	5%	50V
C20	1-136-158-00	FILM	0.027uF	5%	50V
C21	1-161-046-00	CERAMIC	0.0039uF	10%	25V
C22	1-161-046-00	CERAMIC	0.0039uF	10%	25V
C23	1-124-903-11	ELECT	1uF	20%	50V
C24	1-162-288-31	CERAMIC	330PF	10%	50V
		(EE)			
C24	1-162-294-31	CERAMIC	0.001uF	10%	50V
		(EXCEPT EE)			
C25	1-161-327-00	CERAMIC	0.0033uF	30%	16V
C26	1-124-477-11	ELECT	47uF	20%	25V
C27	1-126-962-11	ELECT	3.3uF	20%	50V
C28	1-161-494-00	CERAMIC	0.022uF		25V
C29	1-124-907-11	ELECT	10uF	20%	50V
C30	1-161-494-00	CERAMIC	0.022uF		25V
C31	1-101-005-00	CERAMIC	22000PF		50V
C32	1-162-196-31	CERAMIC	5.6PF	10%	50V
		(AEP, EE)			
C32	1-162-198-31	CERAMIC	8.2PF	10%	50V
		(E, AUS)			
C33	1-161-379-00	CERAMIC	0.01uF	20%	25V
		(EXCEPT EE)			
C33	1-161-494-00	CERAMIC	0.022uF		25V
		(EE)			
C34	1-164-159-11	CERAMIC	0.1uF		50V
		(AEP, EE)			
C37	1-161-374-11	CERAMIC	0.0015uF	20%	50V
		(AEP, EE)			
C38	1-102-120-00	CERAMIC	0.0018uF	10%	50V
		(AEP, EE)			
C39	1-101-005-00	CERAMIC	22000PF		50V
		(AEP, EE)			
C45	1-161-379-00	CERAMIC	0.01uF	20%	25V
C51	1-102-961-00	CERAMIC	27PF	5%	50V
C52	1-102-961-00	CERAMIC	27PF	5%	50V
C53	1-124-477-11	ELECT	47uF	20%	25V
C54	1-161-379-00	CERAMIC	0.01uF	20%	25V
C55	1-161-379-00	CERAMIC	0.01uF	20%	25V
C56	1-161-379-00	CERAMIC	0.01uF	20%	25V
C57	1-161-379-00	CERAMIC	0.01uF	20%	25V
C58	1-161-379-00	CERAMIC	0.01uF	20%	25V
C61	1-124-925-11	ELECT	2.2uF	20%	100V

Ref. No.	Part No.	Description	Remark		
C62	1-124-463-00	ELECT	0. 1uF	20%	50V
C63	1-161-379-00	CERAMIC	0. 01uF	20%	25V
C64	1-161-379-00	CERAMIC	0. 01uF	20%	25V
C65	1-124-120-11	ELECT (EXCEPT AEP1, EE)	220uF	20%	25V
C65	1-126-934-11	ELECT (AEP1, EE)	220uF	20%	16V
C67	1-161-379-00	CERAMIC	0. 01uF	20%	25V
C71	1-136-173-00	FILM (AEP, EE)	0. 47uF	5%	50V
C72	1-161-494-00	CERAMIC (AEP, EE)	0. 022uF		25V
C73	1-124-463-00	ELECT (AEP, EE)	0. 1uF	20%	50V
C301	1-124-477-11	ELECT	47uF	20%	25V
C302	1-124-477-11	ELECT	47uF	20%	25V
C303	1-124-927-11	ELECT	4. 7uF	20%	100V
C304	1-126-176-11	ELECT	220uF	20%	10V
C305	1-124-472-11	ELECT	470uF	20%	10V
C306	1-124-902-00	ELECT	0. 47uF	20%	50V
C308	1-124-472-11	ELECT	470uF	20%	10V
C309	1-124-443-00	ELECT	100uF	20%	10V
C310	1-164-159-11	CERAMIC	0. 1uF		50V
C311	1-164-159-11	CERAMIC	0. 1uF		50V
C312	1-164-159-11	CERAMIC	0. 1uF		50V
C313	1-161-379-00	CERAMIC	0. 01uF	20%	25V
C314	1-161-494-00	CERAMIC	0. 022uF		25V
C315	1-164-159-11	CERAMIC	0. 1uF		50V
C316	1-161-494-00	CERAMIC	0. 022uF		25V
C317	1-162-284-31	CERAMIC	150PF	10%	50V
C318	1-162-284-31	CERAMIC	150PF	10%	50V
C319	1-162-284-31	CERAMIC	150PF	10%	50V
C320	1-162-284-31	CERAMIC	150PF	10%	50V
C321	1-137-437-11	FILM	0. 0056uF	5%	50V
C322	1-137-437-11	FILM	0. 0056uF	5%	50V
C323	1-137-364-11	FILM	0. 001uF	5%	50V
C324	1-137-364-11	FILM	0. 001uF	5%	50V
C325	1-124-477-11	ELECT	47uF	20%	25V
C326	1-124-477-11	ELECT	47uF	20%	25V
C329	1-124-927-11	ELECT	4. 7uF	20%	100V
C1001	1-124-257-00	ELECT	2. 2uF	20%	50V
C1002	1-162-282-31	CERAMIC	100PF	10%	50V
C1003	1-162-282-31	CERAMIC	100PF	10%	50V
C1004	1-124-126-00	ELECT	47uF	20%	10V
C1005	1-161-377-00	CERAMIC	0. 0047uF	20%	16V
C1006	1-161-374-11	CERAMIC	0. 0015uF	20%	50V
C1007	1-124-464-11	ELECT	0. 22uF	20%	50V
C1010	1-124-126-00	ELECT	47uF	20%	10V
C1014	1-164-159-11	CERAMIC	0. 1uF		50V
C1027	1-164-159-11	CERAMIC	0. 1uF		50V

Ref. No.	Part No.	Description	Remark		
C1051	1-124-257-00	ELECT	2. 2uF	20%	50V
C1052	1-162-282-31	CERAMIC	100PF	10%	50V
C1053	1-162-282-31	CERAMIC	100PF	10%	50V
C1054	1-124-126-00	ELECT	47uF	20%	10V
C1055	1-161-377-00	CERAMIC	0. 0047uF	20%	16V
C1056	1-161-374-11	CERAMIC	0. 0015uF	20%	50V
C1057	1-124-464-11	ELECT	0. 22uF	20%	50V
C1060	1-124-126-00	ELECT	47uF	20%	10V
C1064	1-164-159-11	CERAMIC	0. 1uF		50V
C1077	1-164-159-11	CERAMIC	0. 1uF		50V
C1221	1-124-443-00	ELECT	100uF	20%	10V
C1222	1-126-176-11	ELECT	220uF	20%	10V
C1223	1-126-176-11	ELECT	220uF	20%	10V
C1311	1-164-159-11	CERAMIC	0. 1uF		50V
C1312	1-164-159-11	CERAMIC	0. 1uF		50V
C1313	1-126-974-11	ELECT	3300uF	20%	50V
C1314	1-126-974-11	ELECT	3300uF	20%	50V
C1321	1-124-257-00	ELECT	2. 2uF	20%	50V
C1331	1-124-122-11	ELECT	100uF	20%	50V
C1332	1-124-907-11	ELECT	10uF	20%	50V
C1333	1-124-910-11	ELECT	47uF	20%	50V
C1341	1-124-122-11	ELECT	100uF	20%	50V
C1342	1-124-122-11	ELECT	100uF	20%	50V
C1343	1-126-105-11	ELECT	1000uF	20%	35V
C1344	1-126-101-11	ELECT	100uF	20%	16V
C1345	1-124-477-11	ELECT	47uF	20%	25V
C1351	1-164-159-11	CERAMIC	0. 1uF		50V
C1352	1-164-159-11	CERAMIC	0. 1uF		50V
C1353	1-124-636-00	ELECT	3300uF	20%	25V
C1354	1-124-636-00	ELECT	3300uF	20%	25V
C1355	1-124-907-11	ELECT	10uF	20%	50V
C1356	1-124-907-11	ELECT	10uF	20%	50V
C1357	1-124-443-00	ELECT	100uF	20%	10V
C1358	1-124-443-00	ELECT	100uF	20%	10V
C1359	1-124-903-11	ELECT	1uF	20%	50V
C1360	1-164-159-11	CERAMIC	0. 1uF		50V
C1361	1-161-379-00	CERAMIC	0. 01uF	20%	25V
C1362	1-161-379-00	CERAMIC	0. 01uF	20%	25V
C1363	1-162-294-31	CERAMIC	0. 001uF	10%	50V
C1365	1-126-927-11	ELECT	2200uF	20%	6. 3V
C1371	1-124-557-11	ELECT	1000uF	20%	25V
C1372	1-124-907-11	ELECT	10uF	20%	50V
C1373	1-124-463-00	ELECT	0. 1uF	20%	50V
C1374	1-161-379-00	CERAMIC	0. 01uF	20%	25V
C1375	1-161-379-00	CERAMIC	0. 01uF	20%	25V
C1376	1-124-907-11	ELECT	10uF	20%	50V
C1381	1-126-233-11	ELECT (AEP3, E2)	22uF	20%	50V

MAIN

Ref. No.	Part No.	Description	Remark
C1382	1-126-233-11	ELECT 22uF 20% 50V (AEP3, E2)	
< FILTER >			
CF1	1-567-389-11	FILTER, CERAMIC	
CF2	1-567-389-11	FILTER, CERAMIC	
CF4	1-527-981-00	FILTER, CERAMIC	
CF5	1-577-075-11	OSCILLATOR, CERAMIC	
CF6	1-760-220-11	FILTER, CERAMIC	
< CONNECTOR >			
* CN1	1-750-416-11	CONNECTOR, FFC/FPC 11P	
CN301	1-568-934-21	PIN, CONNECTOR 7P	
* CN303	1-568-954-11	PIN, CONNECTOR 5P	
* CN1201	1-537-327-11	TERMINAL BOARD (SPEAKER)	
CN1205	1-764-328-21	PIN, CONNECTOR (PCB) (V TYPE) 5P	
CN1206	1-750-428-11	CONNECTOR, FFC/FPC 23P	
CN1211	1-764-328-11	PIN, CONNECTOR (PCB) (V TYPE) 5P	
* CN1212	1-568-934-11	PIN, CONNECTOR 7P	
CN1301	1-764-333-11	PIN, CONNECTOR (PCB) (V TYPE) 10P	
* CN1302	1-566-210-11	PIN, CONNECTOR 3P (POWER SOURCE) (AEP3, E2)	
< DIODE >			
D1	8-719-987-63	DIODE 1N4148M	
D301	8-719-987-63	DIODE 1N4148M	
D302	8-719-010-33	DIODE UZ-4.7BSB	
D1011	8-719-987-63	DIODE 1N4148M	
D1012	8-719-987-63	DIODE 1N4148M	
D1204	8-719-987-63	DIODE 1N4148M	
D1205	8-719-987-63	DIODE 1N4148M	
D1311	8-719-312-09	DIODE RBA-402 (AEP, EE)	
D1311	8-719-510-68	DIODE D5SBA20F01 (E, AUS)	
D1321	8-719-987-63	DIODE 1N4148M	
D1322	8-719-987-63	DIODE 1N4148M	
D1331	8-719-200-82	DIODE 11ES2	
D1332	8-719-002-60	DIODE UZL-33L	
D1333	8-719-014-66	DIODE UZP-5.6B	
D1334	8-719-200-82	DIODE 11ES2	
D1335	8-719-200-82	DIODE 11ES2	
D1341	8-719-200-82	DIODE 11ES2	
D1342	8-719-200-82	DIODE 11ES2	
D1343	8-719-200-82	DIODE 11ES2	
D1344	8-719-200-82	DIODE 11ES2	
D1345	8-719-001-42	DIODE UZL-11M1 (AEP1)	
D1345	8-719-001-43	DIODE UZL-11M1-TA (EXCEPT AEP1)	
D1351	8-719-200-82	DIODE 11ES2	
D1352	8-719-200-82	DIODE 11ES2	
D1353	8-719-200-82	DIODE 11ES2	

Ref. No.	Part No.	Description	Remark
D1354	8-719-200-82	DIODE 11ES2	
D1358	8-719-200-82	DIODE 11ES2	
D1359	8-719-200-82	DIODE 11ES2	
D1363	8-719-200-82	DIODE 11ES2	
D1364	8-719-200-82	DIODE 11ES2	
D1365	8-719-200-82	DIODE 11ES2	
D1366	8-719-987-63	DIODE 1N4148M	
D1371	8-719-200-82	DIODE 11ES2	
D1372	8-719-200-82	DIODE 11ES2	
D1373	8-719-987-63	DIODE 1N4148M	
< FRONT END >			
FE1	1-693-090-31	FRONT END (FM) (2 GANG) (AEP, E, AUS)	
FE1	1-693-244-11	FRONT END (3 GANG) (EE)	
FE2	1-239-260-11	ENCAPSULATED COMPONENT (E3, AUS)	
FE2	1-239-261-12	ENCAPSULATED COMPONENT (AEP, EE)	
FE3	1-236-463-11	ENCAPSULATED COMPONENT (AEP, EE)	
< IC >			
IC1	8-759-176-03	IC LA1835	
IC51	8-759-175-87	IC LC7218-ST	
IC301	8-759-061-65	IC LA5602	
IC302	8-759-805-37	IC L78LR05D-MA	
IC303	8-759-248-11	IC TMP87CH46N-4067	
IC304	8-759-822-09	IC LB1641	
IC305	8-759-145-58	IC UPC4558C	
IC306	8-759-145-58	IC UPC4558C	
IC307	8-759-605-00	IC M5F78M07L	
IC1001	8-759-634-51	IC M5218AP	
IC1011	8-759-000-48	IC MC14052BCP	
IC1012	8-759-000-49	IC MC14066BCP	
IC1013	8-759-634-51	IC M5218AP	
IC1202	8-759-111-68	IC UPC1237HA	
IC1351	8-759-602-66	IC M5230L-A	
IC1352	8-759-231-53	IC TA7805S	
IC1371	8-759-820-13	IC L78MR06	
IC1381	8-759-604-39	IC M5F78M12L (AEP3, E2)	
< IFT >			
IFT1	1-409-636-11	TRANSFORMER, IF (CERAMIC FILTER)	
< JACK >			
* J1001	1-580-912-11	JACK, PIN 4P (IN (PHONO/VIDEO))	
J1202	1-569-130-11	JACK, PIN 2P (SURROUND SPEAKER)	
< COIL >			
L1	1-407-500-00	INDUCTOR 4.7mH (AEP, EE)	
L1	1-410-688-31	INDUCTOR 1.5mH (E, AUS)	
L2	1-410-524-41	INDUCTOR 220uH (AEP, EE)	

Ref. No.	Part No.	Description	Remark
L1201	1-420-872-00	COIL, AIR-CORE	
L1251	1-420-872-00	COIL, AIR-CORE	
< FILTER >			
LPF1	1-239-597-11	FILTER, LOW PASS	
LPF2	1-239-597-11	FILTER, LOW PASS	
< IC LINK >			
△PS1351	1-532-840-21	LINK, IC (1.25A)	
△PS1352	1-532-840-21	LINK, IC (1.25A)	
< TRANSISTOR >			
Q1	8-729-230-99	TRANSISTOR 2SC2669-OY	
Q3	8-729-119-76	TRANSISTOR 2SA1175-HFE (AEP, EE)	
Q4	8-729-119-76	TRANSISTOR 2SA1175-HFE (AEP, EE)	
Q5	8-729-900-80	TRANSISTOR DTC114ES (AEP, EE)	
Q6	8-729-900-80	TRANSISTOR DTC114ES (AEP, EE)	
Q7	8-729-900-80	TRANSISTOR DTC114ES (AEP, EE)	
Q8	8-729-900-80	TRANSISTOR DTC114ES (AEP, EE)	
Q55	8-729-900-61	TRANSISTOR DTA114ES	
Q61	8-729-202-67	TRANSISTOR 2SK246-GR3	
Q62	8-729-201-84	TRANSISTOR 2SC3112-B	
Q71	8-729-202-67	TRANSISTOR 2SK246-GR3 (AEP, EE)	
Q72	8-729-201-84	TRANSISTOR 2SC3112-B (AEP, EE)	
Q301	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q302	8-729-900-65	TRANSISTOR DTA144ES	
Q303	8-729-900-65	TRANSISTOR DTA144ES	
Q1011	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1012	8-729-900-63	TRANSISTOR DTA124ES	
Q1013	8-729-900-36	TRANSISTOR DTC124ES	
Q1016	8-729-900-80	TRANSISTOR DTC114ES	
Q1017	8-729-900-80	TRANSISTOR DTC114ES	
Q1018	8-729-900-61	TRANSISTOR DTA114ES	
Q1061	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1204	8-729-900-63	TRANSISTOR DTA124ES	
Q1205	8-729-900-80	TRANSISTOR DTC114ES	
Q1331	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q1341	8-729-209-15	TRANSISTOR 2SD2012	
Q1342	8-729-900-80	TRANSISTOR DTC114ES	
Q1353	8-729-900-80	TRANSISTOR DTC114ES	
< RESISTOR >			
R1	1-249-411-11	CARBON 330 5% 1/4W	
R2	1-249-411-11	CARBON 330 5% 1/4W	
R3	1-249-409-11	CARBON 220 5% 1/4W	
△R4	1-249-402-11	CARBON 56 5% 1/4W F	
R5	1-247-891-00	CARBON 330K 5% 1/4W	

Ref. No.	Part No.	Description	Remark
R6	1-249-411-11	CARBON 330 5% 1/4W	
△R9	1-249-405-11	CARBON 100 5% 1/4W F	
R10	1-249-437-11	CARBON 47K 5% 1/4W	
R12	1-249-429-11	CARBON 10K 5% 1/4W	
R13	1-249-442-11	CARBON 510 5% 1/4W	
△R14	1-249-403-11	CARBON 68 5% 1/4W F	
R16	1-249-429-11	CARBON 10K 5% 1/4W	
R17	1-247-842-11	CARBON 3K 5% 1/4W	
R18	1-249-429-11	CARBON 10K 5% 1/4W	
R19	1-249-441-11	CARBON 100K 5% 1/4W	
R20	1-249-435-11	CARBON 33K 5% 1/4W	
R21	1-249-441-11	CARBON 100K 5% 1/4W	
R22	1-249-437-11	CARBON 47K 5% 1/4W	
R23	1-249-399-11	CARBON 33 5% 1/4W	
R24	1-249-425-11	CARBON 4.7K 5% 1/4W (AEP, EE)	
R25	1-249-429-11	CARBON 10K 5% 1/4W (AEP, EE)	
R26	1-249-429-11	CARBON 10K 5% 1/4W (AEP, EE)	
R27	1-249-429-11	CARBON 10K 5% 1/4W (AEP, EE)	
R30	1-249-429-11	CARBON 10K 5% 1/4W (AEP, EE)	
R31	1-249-429-11	CARBON 10K 5% 1/4W (AEP, EE)	
R32	1-249-433-11	CARBON 22K 5% 1/4W (AEP, EE)	
R33	1-247-903-00	CARBON 1M 5% 1/4W (AEP, EE)	
R34	1-249-437-11	CARBON 47K 5% 1/4W (AEP, EE)	
R35	1-249-423-11	CARBON 3.3K 5% 1/4W	
R36	1-249-423-11	CARBON 3.3K 5% 1/4W	
R45	1-249-426-11	CARBON 5.6K 5% 1/4W	
R46	1-249-426-11	CARBON 5.6K 5% 1/4W	
R48	1-249-423-11	CARBON 3.3K 5% 1/4W	
R49	1-249-429-11	CARBON 10K 5% 1/4W	
△R50	1-249-401-11	CARBON 47 5% 1/4W F	
R51	1-249-417-11	CARBON 1K 5% 1/4W	
R52	1-249-417-11	CARBON 1K 5% 1/4W	
R53	1-249-417-11	CARBON 1K 5% 1/4W	
R54	1-249-417-11	CARBON 1K 5% 1/4W	
R56	1-249-425-11	CARBON 4.7K 5% 1/4W	
R57	1-249-417-11	CARBON 1K 5% 1/4W	
R58	1-249-417-11	CARBON 1K 5% 1/4W	
△R60	1-249-405-11	CARBON 100 5% 1/4W F	
R61	1-249-423-11	CARBON 3.3K 5% 1/4W	
R62	1-249-425-11	CARBON 4.7K 5% 1/4W	
R63	1-249-414-11	CARBON 560 5% 1/4W	
R64	1-249-417-11	CARBON 1K 5% 1/4W	
R65	1-249-410-11	CARBON 270 5% 1/4W	
R66	1-249-421-11	CARBON 2.2K 5% 1/4W	
R67	1-249-425-11	CARBON 4.7K 5% 1/4W	
R68	1-249-425-11	CARBON 4.7K 5% 1/4W	
R69	1-247-807-31	CARBON 100 5% 1/4W	
R71	1-249-423-11	CARBON 3.3K 5% 1/4W (AEP, EE)	
R72	1-249-433-11	CARBON 22K 5% 1/4W (AEP, EE)	

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

MAIN

Ref. No.	Part No.	Description	Remark
R73	1-249-414-11	CARBON	560 5% 1/4W (AEP, EE)
R74	1-249-417-11	CARBON	1K 5% 1/4W (AEP, EE)
R74	1-249-417-11	CARBON	1K 5% 1/4W (AEP, EE)
R75	1-249-410-11	CARBON	270 5% 1/4W (AEP, EE)
R76	1-249-421-11	CARBON	2. 2K 5% 1/4W (AEP, EE)
R77	1-249-425-11	CARBON	4. 7K 5% 1/4W (AEP, EE)
R78	1-247-807-31	CARBON	100 5% 1/4W (AEP, EE)
R301	1-249-429-11	CARBON	10K 5% 1/4W
R302	1-249-429-11	CARBON	10K 5% 1/4W
R303	1-249-417-11	CARBON	1K 5% 1/4W
R304	1-249-425-11	CARBON	4. 7K 5% 1/4W
R305	1-249-417-11	CARBON	1K 5% 1/4W
R306	1-249-417-11	CARBON	1K 5% 1/4W
R307	1-249-417-11	CARBON	1K 5% 1/4W
R308	1-249-417-11	CARBON	1K 5% 1/4W
R309	1-249-431-11	CARBON	15K 5% 1/4W
R310	1-249-431-11	CARBON	15K 5% 1/4W
R311	1-249-431-11	CARBON	15K 5% 1/4W
R312	1-249-425-11	CARBON	4. 7K 5% 1/4W
R313	1-249-425-11	CARBON	4. 7K 5% 1/4W
R314	1-249-429-11	CARBON	10K 5% 1/4W
R315	1-249-429-11	CARBON	10K 5% 1/4W
R316	1-249-429-11	CARBON	10K 5% 1/4W
R317	1-249-429-11	CARBON	10K 5% 1/4W
R318	1-249-417-11	CARBON	1K 5% 1/4W
R319	1-249-417-11	CARBON	1K 5% 1/4W
R320	1-247-852-11	CARBON	7. 5K 5% 1/4W
R321	1-247-852-11	CARBON	7. 5K 5% 1/4W
R322	1-247-852-11	CARBON	7. 5K 5% 1/4W
R323	1-247-852-11	CARBON	7. 5K 5% 1/4W
R324	1-249-431-11	CARBON	15K 5% 1/4W
R325	1-249-431-11	CARBON	15K 5% 1/4W
R326	1-249-431-11	CARBON	15K 5% 1/4W
R327	1-249-431-11	CARBON	15K 5% 1/4W
R328	1-249-419-11	CARBON	1. 5K 5% 1/4W
R329	1-249-419-11	CARBON	1. 5K 5% 1/4W
R330	1-249-419-11	CARBON	1. 5K 5% 1/4W
R331	1-249-419-11	CARBON	1. 5K 5% 1/4W
R332	1-249-441-11	CARBON	100K 5% 1/4W
R333	1-249-441-11	CARBON	100K 5% 1/4W
R1001	1-249-417-11	CARBON	1K 5% 1/4W
R1002	1-249-437-11	CARBON	47K 5% 1/4W
R1003	1-249-416-11	CARBON	820 5% 1/4W
R1004	1-247-897-11	CARBON	560K 5% 1/4W
R1005	1-249-437-11	CARBON	47K 5% 1/4W
R1006	1-249-409-11	CARBON	220 5% 1/4W
R1007	1-249-441-11	CARBON	100K 5% 1/4W
R1011	1-247-852-11	CARBON	7. 5K 5% 1/4W
R1013	1-249-425-11	CARBON	4. 7K 5% 1/4W

Ref. No.	Part No.	Description	Remark
R1014	1-249-417-11	CARBON	1K 5% 1/4W
R1015	1-247-903-00	CARBON	1M 5% 1/4W
R1016	1-249-437-11	CARBON	47K 5% 1/4W
R1017	1-249-437-11	CARBON	47K 5% 1/4W
R1018	1-249-417-11	CARBON	1K 5% 1/4W
R1020	1-249-437-11	CARBON	47K 5% 1/4W
R1022	1-249-437-11	CARBON	47K 5% 1/4W
R1023	1-249-437-11	CARBON	47K 5% 1/4W
R1024	1-249-437-11	CARBON	47K 5% 1/4W
R1025	1-249-437-11	CARBON	47K 5% 1/4W
R1035	1-249-441-11	CARBON	100K 5% 1/4W
R1036	1-247-889-00	CARBON	270K 5% 1/4W
R1051	1-249-417-11	CARBON	1K 5% 1/4W
R1052	1-249-437-11	CARBON	47K 5% 1/4W
R1053	1-249-416-11	CARBON	820 5% 1/4W
R1054	1-247-897-11	CARBON	560K 5% 1/4W
R1055	1-249-437-11	CARBON	47K 5% 1/4W
R1056	1-249-409-11	CARBON	220 5% 1/4W
R1057	1-249-441-11	CARBON	100K 5% 1/4W
R1061	1-247-852-11	CARBON	7. 5K 5% 1/4W
R1063	1-249-425-11	CARBON	4. 7K 5% 1/4W
R1064	1-249-417-11	CARBON	1K 5% 1/4W
R1065	1-247-903-00	CARBON	1M 5% 1/4W
R1074	1-249-437-11	CARBON	47K 5% 1/4W
R1075	1-249-437-11	CARBON	47K 5% 1/4W
R1085	1-249-441-11	CARBON	100K 5% 1/4W
R1086	1-247-889-00	CARBON	270K 5% 1/4W
R1220	1-249-389-11	CARBON	4. 7 5% 1/4W
R1221	1-249-389-11	CARBON	4. 7 5% 1/4W
R1222	1-249-409-11	CARBON	220 5% 1/4W
R1223	1-249-409-11	CARBON	220 5% 1/4W
△R1226	1-215-890-11	METAL OXIDE (AEP, EE)	470 5% 2W F
△R1226	1-216-455-11	METAL OXIDE (E, AUS)	560 5% 2W F
R1233	1-249-425-11	CARBON	4. 7K 5% 1/4W
R1234	1-249-425-11	CARBON	4. 7K 5% 1/4W
R1235	1-249-435-11	CARBON	33K 5% 1/4W
R1236	1-249-441-11	CARBON (AEP3, E, AUS, EE)	100K 5% 1/4W
R1237	1-249-429-11	CARBON	10K 5% 1/4W
R1240	1-249-438-11	CARBON	56K 5% 1/4W
R1241	1-249-397-11	CARBON	22 5% 1/4W
R1244	1-249-417-11	CARBON	1K 5% 1/4W
R1245	1-249-417-11	CARBON	1K 5% 1/4W
R1270	1-249-389-11	CARBON	4. 7 5% 1/4W
R1271	1-249-389-11	CARBON	4. 7 5% 1/4W
R1272	1-249-409-11	CARBON	220 5% 1/4W
R1273	1-249-409-11	CARBON	220 5% 1/4W

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark		
R1290	1-249-437-11	CARBON	47K	5%	1/4W
R1321	1-249-429-11	CARBON	10K	5%	1/4W
R1322	1-249-429-11	CARBON	10K	5%	1/4W
△R1331	1-212-849-00	FUSIBLE	4.7	5%	1/4W F
R1332	1-249-421-11	CARBON	2.2K	5%	1/4W
R1333	1-249-425-11	CARBON	4.7K	5%	1/4W
R1341	1-249-421-11	CARBON	2.2K	5%	1/4W
R1351	1-249-409-11	CARBON	220	5%	1/4W
R1352	1-249-409-11	CARBON	220	5%	1/4W
R1353	1-249-429-11	CARBON	10K	5%	1/4W
R1354	1-249-423-11	CARBON	3.3K	5%	1/4W
R1355	1-247-807-31	CARBON (E, AUS)	100	5%	1/4W
R1355	1-249-409-11	CARBON (AEP, EE)	220	5%	1/4W
R1356	1-247-807-31	CARBON (E, AUS)	100	5%	1/4W
R1356	1-249-409-11	CARBON (AEP, EE)	220	5%	1/4W
R1357	1-249-417-11	CARBON	1K	5%	1/4W
R1358	1-249-417-11	CARBON	1K	5%	1/4W
R1359	1-249-441-11	CARBON	100K	5%	1/4W
R1360	1-249-412-11	CARBON	390	5%	1/4W
R1371	1-249-417-11	CARBON	1K	5%	1/4W
R1372	1-249-429-11	CARBON	10K	5%	1/4W
< VARIABLE RESISTOR >					
RV1	1-238-601-11	RES, ADJ, CARBON 22K			
RV2	1-238-600-11	RES, ADJ, CARBON 10K			
< RELAY >					
RY1201	1-515-920-11	RELAY (24V)			
< TERMINAL >					
* TM1	1-537-264-11	TERMINAL BOARD (ANTENNA) (E, AUS)			
* TM1	1-537-288-11	TERMINAL BOARD, ANTENNA (PAL) (ANTENNA) (AEP, EE)			
< VIBRATOR >					
X301	1-579-125-11	VIBRATOR, CERAMIC (8MHz)			
XT51	1-577-126-21	VIBRATOR, CRYSTAL (7.2MHz)			

Ref. No.	Part No.	Description	Remark		
*	A-4369-922-A	MAIN TC BOARD, COMPLETE *****			
*	4-942-204-01	PLATE, GROUND < CAPACITOR >			
C722	1-137-368-11	FILM	0.0047uF	5%	50V
C723	1-162-291-31	CERAMIC	560PF	10%	50V
C726	1-137-399-11	FILM	0.1uF	5%	50V
C727	1-126-791-11	ELECT	10uF	20%	35V
C728	1-124-903-11	ELECT	1uF	20%	50V
C729	1-124-465-00	ELECT	0.47uF	20%	50V
C730	1-124-907-11	ELECT	10uF	20%	50V
C731	1-164-159-11	CERAMIC	0.1uF		50V
C732	1-126-791-11	ELECT	10uF	20%	35V
C741	1-124-903-11	ELECT	1uF	20%	50V
C742	1-126-791-11	ELECT	10uF	20%	35V
C822	1-137-368-11	FILM	0.0047uF	5%	50V
C823	1-162-291-31	CERAMIC	560PF	10%	50V
C826	1-137-399-11	FILM	0.1uF	5%	50V
C827	1-124-907-11	ELECT	10uF	20%	50V
C828	1-124-903-11	ELECT	1uF	20%	50V
C829	1-124-902-00	ELECT	0.47uF	20%	50V
C830	1-124-907-11	ELECT	10uF	20%	50V
C831	1-161-377-00	CERAMIC	0.0047uF	20%	16V
C832	1-161-375-00	CERAMIC	0.0022uF	20%	50V
C833	1-124-902-00	ELECT	0.47uF	20%	50V
C841	1-124-903-11	ELECT	1uF	20%	50V
C842	1-124-907-11	ELECT	10uF	20%	50V
C901	1-124-443-00	ELECT	100uF	20%	10V
C902	1-124-471-00	ELECT	1000uF	20%	6.3V
C903	1-124-443-00	ELECT	100uF	20%	10V
C910	1-124-907-11	ELECT	10uF	20%	50V
C911	1-124-907-11	ELECT	10uF	20%	50V
C912	1-124-120-11	ELECT	220uF	20%	25V
C914	1-124-584-00	ELECT	100uF	20%	10V
C916	1-124-443-00	ELECT	100uF	20%	10V
C917	1-124-443-00	ELECT	100uF	20%	10V
C918	1-124-443-00	ELECT	100uF	20%	10V
C956	1-162-290-31	CERAMIC	470PF	10%	50V
C957	1-162-290-31	CERAMIC	470PF	10%	50V
C958	1-164-159-11	CERAMIC	0.1uF		50V
C959	1-164-159-11	CERAMIC	0.1uF		50V
< CONNECTOR >					
* CN901	1-568-945-11	PIN, CONNECTOR 7P			
CN902	1-764-342-11	PIN, CONNECTOR (PCB) (L TYPE) 5P			
CN904	1-764-339-11	PIN, CONNECTOR (PCB) (L TYPE) 2P			
CN905	1-580-783-11	CONNECTOR, BOARD TO BOARD			

The components identified by
mark △ or dotted line with mark.
△ are critical for safety.
Replace only with part number
specified.

MAIN TC

Ref. No.	Part No.	Description	Remark
CN906	1-580-783-11	CONNECTOR, BOARD TO BOARD	
CN907	1-580-783-11	CONNECTOR, BOARD TO BOARD	
* CN908	1-568-850-11	SOCKET, CONNECTOR 7P	
* CN909	1-568-850-11	SOCKET, CONNECTOR 7P	
CN910	1-750-741-11	CONNECTOR, FFC/FPC 9P	
CN911	1-750-454-11	CONNECTOR, FFC/FPC 13P	
* CN912	1-568-449-11	HOUSING, CONNECTOR (PC BOARD) 3P	
< DIODE >			
D901	8-719-987-63	DIODE 1N4148M	
D902	8-719-987-63	DIODE 1N4148M	
D903	8-719-987-63	DIODE 1N4148M	
D904	8-719-987-63	DIODE 1N4148M	
D905	8-719-987-63	DIODE 1N4148M	
< IC >			
IC901	8-759-098-75	IC HA12171NT	
IC902	8-759-250-60	IC M50964-261FP	
IC903	8-759-635-63	IC M51943BSL-TP	
IC904	8-759-266-35	IC TA8242AK	
< TRANSISTOR >			
Q701	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q801	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q901	8-729-900-65	TRANSISTOR DTA144ES	
Q902	8-729-900-89	TRANSISTOR DTC144ES	
Q903	8-729-900-89	TRANSISTOR DTC144ES	
Q904	8-729-900-65	TRANSISTOR DTA144ES	
Q905	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q906	8-729-116-56	TRANSISTOR 2SB1068-L	
Q907	8-729-116-56	TRANSISTOR 2SB1068-L	
Q908	8-729-900-65	TRANSISTOR DTA144ES	
Q909	8-729-900-89	TRANSISTOR DTC144ES	
Q910	8-729-900-65	TRANSISTOR DTA144ES	
< RESISTOR >			
R720	1-215-451-00	METAL 18K 1% 1/6W	
R721	1-249-430-11	CARBON 12K 5% 1/4W	
R722	1-249-431-11	CARBON 15K 5% 1/4W	
R723	1-249-425-11	CARBON 4.7K 5% 1/4W	
R724	1-249-428-11	CARBON 8.2K 5% 1/4W	
R725	1-249-429-11	CARBON 10K 5% 1/4W	
R727	1-249-429-11	CARBON 10K 5% 1/4W	
R730	1-249-429-11	CARBON 10K 5% 1/4W	
R731	1-249-425-11	CARBON 4.7K 5% 1/4W	
R732	1-249-429-11	CARBON 10K 5% 1/4W	
R733	1-249-429-11	CARBON 10K 5% 1/4W	
R734	1-249-429-11	CARBON 10K 5% 1/4W	
R735	1-247-864-11	CARBON 24K 5% 1/4W	

Ref. No.	Part No.	Description	Remark
R736	1-249-429-11	CARBON 10K 5% 1/4W	
R737	1-249-429-11	CARBON 10K 5% 1/4W	
R738	1-249-429-11	CARBON 10K 5% 1/4W	
R741	1-249-421-11	CARBON 2.2K 5% 1/4W	
R742	1-249-428-11	CARBON 8.2K 5% 1/4W	
R743	1-247-840-00	CARBON 2.4K 5% 1/4W	
R744	1-249-433-11	CARBON 22K 5% 1/4W	
R745	1-249-417-11	CARBON 1K 5% 1/4W	
R821	1-249-430-11	CARBON 12K 5% 1/4W	
R822	1-249-431-11	CARBON 15K 5% 1/4W	
R823	1-249-425-11	CARBON 4.7K 5% 1/4W	
R824	1-249-428-11	CARBON 8.2K 5% 1/4W	
R825	1-247-882-11	CARBON 130K 5% 1/4W	
R826	1-247-866-11	CARBON 30K 5% 1/4W	
R829	1-249-429-11	CARBON 10K 5% 1/4W	
R830	1-249-432-11	CARBON 18K 5% 1/4W	
R831	1-247-885-00	CARBON 180K 5% 1/4W	
R841	1-249-421-11	CARBON 2.2K 5% 1/4W	
R842	1-249-428-11	CARBON 8.2K 5% 1/4W	
R843	1-247-840-00	CARBON 2.4K 5% 1/4W	
R844	1-249-433-11	CARBON 22K 5% 1/4W	
R845	1-249-417-11	CARBON 1K 5% 1/4W	
R901	1-247-807-31	CARBON 100 5% 1/4W	
R902	1-249-389-11	CARBON 4.7 5% 1/4W	
R907	1-249-429-11	CARBON 10K 5% 1/4W	
R908	1-247-903-00	CARBON 1M 5% 1/4W	
R909	1-247-895-00	CARBON 470K 5% 1/4W	
R910	1-247-895-00	CARBON 470K 5% 1/4W	
R911	1-249-410-11	CARBON 270 5% 1/4W	
R912	1-249-410-11	CARBON 270 5% 1/4W	
R914	1-249-411-11	CARBON 330 5% 1/4W	
R915	1-249-411-11	CARBON 330 5% 1/4W	
R917	1-249-411-11	CARBON 330 5% 1/4W	
R918	1-249-417-11	CARBON 1K 5% 1/4W	
R919	1-249-429-11	CARBON 10K 5% 1/4W	
R920	1-249-429-11	CARBON 10K 5% 1/4W	
R921	1-249-421-11	CARBON 2.2K 5% 1/4W	
R922	1-249-421-11	CARBON 2.2K 5% 1/4W	
R923	1-249-429-11	CARBON 10K 5% 1/4W	
R926	1-249-429-11	CARBON 10K 5% 1/4W	
R927	1-249-425-11	CARBON 4.7K 5% 1/4W	
R928	1-249-429-11	CARBON 10K 5% 1/4W	
R929	1-249-415-11	CARBON 680 5% 1/4W	
R930	1-249-414-11	CARBON 560 5% 1/4W	
R931	1-249-415-11	CARBON 680 5% 1/4W	
R932	1-249-429-11	CARBON 10K 5% 1/4W	
R933	1-249-415-11	CARBON 680 5% 1/4W	
R934	1-249-429-11	CARBON 10K 5% 1/4W	
R935	1-249-415-11	CARBON 680 5% 1/4W	

Ref. No.	Part No.	Description	Remark		
R936	1-249-429-11	CARBON	10K	5%	1/4W
R937	1-249-429-11	CARBON	10K	5%	1/4W
R938	1-249-429-11	CARBON	10K	5%	1/4W
R939	1-249-429-11	CARBON	10K	5%	1/4W
R940	1-249-429-11	CARBON	10K	5%	1/4W
R941	1-249-429-11	CARBON	10K	5%	1/4W
R942	1-249-441-11	CARBON	100K	5%	1/4W
R943	1-249-441-11	CARBON	100K	5%	1/4W
R958	1-247-807-31	CARBON	100	5%	1/4W
R959	1-249-381-11	CARBON	1	5%	1/4W
R960	1-249-381-11	CARBON	1	5%	1/4W
R968	1-247-807-31	CARBON	100	5%	1/4W
R969	1-249-381-11	CARBON	1	5%	1/4W
R970	1-249-381-11	CARBON	1	5%	1/4W
R971	1-249-429-11	CARBON	10K	5%	1/4W
R972	1-249-425-11	CARBON	4.7K	5%	1/4W
R973	1-249-434-11	CARBON	27K	5%	1/4W
R974	1-249-429-11	CARBON	10K	5%	1/4W
R976	1-249-425-11	CARBON	4.7K	5%	1/4W
R977	1-249-434-11	CARBON	27K	5%	1/4W

< VARIABLE RESISTOR >

RV701	1-230-496-11	RES, ADJ, CARBON 10K
RV801	1-230-496-11	RES, ADJ, CARBON 10K

< VIBRATOR >

X901	1-577-358-21	VIBRATOR, CERAMIC (4MHz)
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*	A-4365-945-A	PANEL BOARD, COMPLETE (AEP2, AEP3)
*	A-4369-090-A	PANEL BOARD, COMPLETE (EE)
*	A-4369-592-A	PANEL BOARD, COMPLETE (E, AUS)
*	A-4371-095-A	PANEL BOARD, COMPLETE (AEP1)

*	4-942-301-01	HOLDER, FL TUBE
*	4-949-935-21	CUSHION (FL)
*	4-962-699-01	HOLDER, FL TUBE

< CAPACITOR >

C601	1-164-159-11	CERAMIC	0.1uF		50V
C602	1-124-261-00	ELECT	10uF	20%	50V
C603	1-104-905-11	DOUBLE LAYERS	0.22F		5.5V
C604	1-164-159-11	CERAMIC	0.1uF		50V
C605	1-136-169-00	FILM	0.22uF	5%	50V
C606	1-161-375-00	CERAMIC (AEP1)	0.0022uF	20%	50V
C607	1-161-379-00	CERAMIC	0.01uF	20%	25V
C608	1-161-379-00	CERAMIC	0.01uF	20%	25V
C609	1-124-910-11	ELECT	47uF	20%	50V

Ref. No.	Part No.	Description	Remark		
C610	1-161-379-00	CERAMIC	0.01uF	20%	25V
C661	1-124-903-11	ELECT	1uF	20%	50V
C662	1-124-903-11	ELECT	1uF	20%	50V
C1102	1-124-589-11	ELECT	47uF	20%	16V
C1103	1-162-282-31	CERAMIC	100PF	10%	50V
C1104	1-124-257-00	ELECT	2.2uF	20%	50V
C1105	1-124-464-11	ELECT	0.22uF	20%	50V
C1106	1-137-374-11	FILM	0.047uF	5%	50V
C1107	1-124-464-11	ELECT	0.22uF	20%	50V
C1108	1-137-442-11	FILM	0.039uF	5%	50V
C1109	1-137-441-11	FILM	0.027uF	5%	50V
C1110	1-137-457-11	FILM	0.0027uF	5%	50V
C1111	1-161-327-00	CERAMIC	0.0033uF	20%	16V
C1112	1-162-293-31	CERAMIC	820PF	10%	50V
C1113	1-161-379-00	CERAMIC	0.01uF	20%	25V
C1114	1-124-589-11	ELECT	47uF	20%	16V
C1115	1-124-257-00	ELECT	2.2uF	20%	50V
C1120	1-161-379-00	CERAMIC	0.01uF	20%	25V
C1121	1-161-379-00	CERAMIC	0.01uF	20%	25V
C1123	1-162-282-31	CERAMIC	100PF	10%	50V
C1143	1-126-176-11	ELECT	220uF	20%	10V
C1152	1-124-589-11	ELECT	47uF	20%	16V
C1153	1-162-282-31	CERAMIC	100PF	10%	50V
C1154	1-124-257-00	ELECT	2.2uF	20%	50V
C1155	1-124-464-11	ELECT	0.22uF	20%	50V
C1156	1-137-374-11	FILM	0.047uF	5%	50V
C1157	1-124-464-11	ELECT	0.22uF	20%	50V
C1158	1-137-442-11	FILM	0.039uF	5%	50V
C1159	1-137-441-11	FILM	0.027uF	5%	50V
C1160	1-137-457-11	FILM	0.0027uF	5%	50V
C1161	1-161-327-00	CERAMIC	0.0033uF	20%	16V
C1162	1-162-293-31	CERAMIC	820PF	10%	50V
C1163	1-161-379-00	CERAMIC	0.01uF	20%	25V
C1164	1-124-589-11	ELECT	47uF	20%	16V
C1165	1-124-257-00	ELECT	2.2uF	20%	50V
C1173	1-162-282-31	CERAMIC	100PF	10%	50V
C1197	1-161-379-00	CERAMIC	0.01uF	20%	25V
C1501	1-162-294-31	CERAMIC	0.001uF	10%	50V
C1502	1-124-234-00	ELECT	22uF	20%	16V
C1503	1-124-234-00	ELECT	22uF	20%	16V
C1508	1-161-379-00	CERAMIC	0.01uF	20%	25V
C1509	1-126-163-11	ELECT	4.7uF	20%	50V
C1510	1-124-234-00	ELECT	22uF	20%	16V
C1511	1-124-584-00	ELECT	100uF	20%	10V
C1512	1-164-159-11	CERAMIC	0.1uF		50V
C1513	1-164-159-11	CERAMIC	0.1uF		50V
C1514	1-124-584-00	ELECT	100uF	20%	10V

PANEL

Ref. No.	Part No.	Description	Remark
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< CONNECTOR >

* CN601	1-750-416-11	CONNECTOR, FFC/FPC 11P	
CN1101	1-750-428-11	CONNECTOR, FFC/FPC 23P	
CN1102	1-506-469-11	PIN, CONNECTOR 4P	

< COMPOSITION CIRCUIT BLOCK >

CP601	1-239-505-11	COMPOSITION CIRCUIT BLOCK	
* CP602	1-233-216-11	COMPOSITION CIRCUIT BLOCK	
CP1511	1-239-054-11	COMPOSITION CIRCUIT BLOCK	
CP1512	1-239-054-11	COMPOSITION CIRCUIT BLOCK	

< DIODE >

D601	8-719-987-63	DIODE	1N4148M
D602	8-719-987-63	DIODE	1N4148M
D603	8-719-987-63	DIODE	1N4148M
D604	8-719-200-82	DIODE	11ES2
D623	8-719-987-63	DIODE	1N4148M (E, AUS)
D624	8-719-987-63	DIODE	1N4148M (EE)
D626	8-719-987-63	DIODE	1N4148M
D671	8-719-046-46	LED	SEL5221S-TH8C (ON/STANDBY)
D1130	8-719-038-63	LED	SEL5220S-TH8C (VIDEO)
D1131	8-719-038-63	LED	SEL5220S-TH8C (TAPE)
D1132	8-719-038-63	LED	SEL5220S-TH8C (CD)
D1133	8-719-038-63	LED	SEL5220S-TH8C (TUNER)
D1134	8-719-038-63	LED	SEL5220S-TH8C (PHONO)
D1145	8-719-038-63	LED	SEL5220S-TH8C (VOLUME)
D1150	8-719-987-63	DIODE	1N4148M
D1151	8-719-987-63	DIODE	1N4148M
D1152	8-719-987-63	DIODE	1N4148M
D1160	8-719-038-63	LED	SEL5220S-TH8C (FLAT)
D1161	8-719-038-63	LED	SEL5220S-TH8C (DANCE)
D1162	8-719-038-63	LED	SEL5220S-TH8C (POPS)
D1163	8-719-038-63	LED	SEL5220S-TH8C (ROCK)
D1164	8-719-038-63	LED	SEL5220S-TH8C (CLASSIC)
D1171	8-719-987-63	DIODE	1N4148M

< FLUORESCENT INDICATOR >

FL601	1-517-258-11	INDICATOR TUBE, FLUORESCENT	
FL1501	1-517-260-11	INDICATOR TUBE, FLUORESCENT	

< IC >

IC601	8-759-248-06	IC	uPD78042GF-053-3B9
IC602	8-749-920-83	IC	GP1U52XB
IC1101	8-759-634-51	IC	M5218AP
IC1102	8-759-634-51	IC	M5218AP
IC1103	8-759-820-62	IC	LB1639
IC1104	8-759-916-12	IC	SN74HC00AN
IC1106	8-759-000-48	IC	MC14052BCP

Ref. No.	Part No.	Description	Remark
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IC1501	8-759-065-87	IC	XR-1096
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< COIL >

L601	1-410-521-11	INDUCTOR	100uH
L1101	1-408-096-00	INDUCTOR	470uH (AEP1)
L1101	1-410-624-11	INDUCTOR	560uH (EXCEPT AEP1)
L1102	1-408-080-00	INDUCTOR	100uH (AEP1)
L1102	1-410-521-11	INDUCTOR	100uH (EXCEPT AEP1)

< TRANSISTOR >

Q601	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q602	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q671	8-729-900-63	TRANSISTOR	DTA124ES
Q1101	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q1102	8-729-141-26	TRANSISTOR	2SC3622A-LK
Q1103	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q1104	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q1105	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q1121	8-729-900-61	TRANSISTOR	DTA114ES
Q1124	8-729-900-36	TRANSISTOR	DTC124ES
Q1125	8-729-900-36	TRANSISTOR	DTC124ES
Q1126	8-729-900-36	TRANSISTOR	DTC124ES
Q1141	8-729-900-63	TRANSISTOR	DTA124ES
Q1143	8-729-900-80	TRANSISTOR	DTC114ES
Q1144	8-729-900-80	TRANSISTOR	DTC114ES
Q1145	8-729-900-61	TRANSISTOR	DTA114ES
Q1147	8-729-900-36	TRANSISTOR	DTC124ES
Q1148	8-729-900-63	TRANSISTOR	DTA124ES
Q1151	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q1152	8-729-141-26	TRANSISTOR	2SC3622A-LK
Q1153	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q1154	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q1155	8-729-119-78	TRANSISTOR	2SC2785-HFE

< RESISTOR >

R601	1-249-417-11	CARBON	1K	5%	1/4W
R603	1-249-437-11	CARBON	47K	5%	1/4W
R604	1-249-433-11	CARBON	22K	5%	1/4W
R605	1-249-433-11	CARBON	22K	5%	1/4W
R606	1-249-429-11	CARBON	10K	5%	1/4W
R607	1-249-429-11	CARBON	10K	5%	1/4W
R608	1-249-423-11	CARBON	3.3K	5%	1/4W
R609	1-249-417-11	CARBON	1K	5%	1/4W
R610	1-249-425-11	CARBON	4.7K	5%	1/4W
R611	1-249-429-11	CARBON	10K	5%	1/4W
R613	1-249-429-11	CARBON	10K	5%	1/4W
R614	1-249-429-11	CARBON	10K	5%	1/4W
R615	1-249-433-11	CARBON	22K	5%	1/4W
R616	1-249-433-11	CARBON	22K	5%	1/4W

PANEL

Ref. No.	Part No.	Description	Remark		
R621	1-249-419-11	CARBON	1.5K	5%	1/4W
R622	1-247-807-31	CARBON	100	5%	1/4W
R623	1-249-406-11	CARBON	120	5%	1/4W
R624	1-249-406-11	CARBON	120	5%	1/4W
R625	1-247-811-31	CARBON	150	5%	1/4W
R626	1-249-408-11	CARBON	180	5%	1/4W
R627	1-249-409-11	CARBON	220	5%	1/4W
R628	1-249-410-11	CARBON	270	5%	1/4W
R629	1-249-411-11	CARBON	330	5%	1/4W
R630	1-249-413-11	CARBON	470	5%	1/4W
R631	1-249-414-11	CARBON	560	5%	1/4W
R632	1-249-416-11	CARBON	820	5%	1/4W
R633	1-249-418-11	CARBON	1.2K	5%	1/4W
R634	1-249-421-11	CARBON	2.2K	5%	1/4W
R635	1-249-419-11	CARBON	1.5K	5%	1/4W
R636	1-247-807-31	CARBON	100	5%	1/4W
R637	1-249-406-11	CARBON	120	5%	1/4W
R638	1-249-406-11	CARBON	120	5%	1/4W
R639	1-247-811-31	CARBON	150	5%	1/4W
R640	1-249-408-11	CARBON	180	5%	1/4W
R641	1-249-409-11	CARBON	220	5%	1/4W
R642	1-249-410-11	CARBON	270	5%	1/4W
R643	1-249-411-11	CARBON	330	5%	1/4W
R644	1-249-413-11	CARBON	470	5%	1/4W
R645	1-249-414-11	CARBON	560	5%	1/4W
R646	1-249-416-11	CARBON	820	5%	1/4W
R647	1-249-418-11	CARBON	1.2K	5%	1/4W
R648	1-249-421-11	CARBON	2.2K	5%	1/4W
R649	1-249-424-11	CARBON	3.9K	5%	1/4W
R651	1-249-385-11	CARBON	2.2	5%	1/6W
R652	1-249-385-11	CARBON	2.2	5%	1/6W
R653	1-249-386-11	CARBON	2.7	5%	1/6W
R661	1-249-417-11	CARBON	1K	5%	1/4W
R662	1-249-417-11	CARBON	1K	5%	1/4W
R663	1-249-417-11	CARBON	1K	5%	1/4W
R664	1-249-417-11	CARBON	1K	5%	1/4W
R665	1-249-417-11	CARBON	1K	5%	1/4W
R666	1-249-417-11	CARBON	1K	5%	1/4W
R671	1-249-412-11	CARBON	390	5%	1/4W
R1102	1-249-417-11	CARBON	1K	5%	1/4W
R1103	1-249-431-11	CARBON	15K	5%	1/4W
R1104	1-249-441-11	CARBON	100K	5%	1/4W
R1105	1-249-433-11	CARBON	22K	5%	1/4W
R1106	1-249-424-11	CARBON	3.9K	5%	1/4W
R1107	1-249-441-11	CARBON	100K	5%	1/4W
R1108	1-249-427-11	CARBON	6.8K	5%	1/4W
R1109	1-249-412-11	CARBON	390	5%	1/4W
R1110	1-249-417-11	CARBON	1K	5%	1/4W
R1111	1-249-441-11	CARBON	100K	5%	1/4W

Ref. No.	Part No.	Description	Remark		
R1114	1-249-431-11	CARBON	15K	5%	1/4W
R1115	1-249-439-11	CARBON	68K	5%	1/4W
R1116	1-249-423-11	CARBON	3.3K	5%	1/4W
R1117	1-249-440-11	CARBON	82K	5%	1/4W
R1118	1-249-412-11	CARBON	390	5%	1/4W
R1119	1-249-427-11	CARBON	6.8K	5%	1/4W
R1120	1-247-862-11	CARBON	20K	5%	1/4W
R1122	1-249-433-11	CARBON	22K	5%	1/4W
R1123	1-249-421-11	CARBON	2.2K	5%	1/4W
R1124	1-249-425-11	CARBON	4.7K	5%	1/4W
R1125	1-249-433-11	CARBON	22K	5%	1/4W
R1126	1-249-420-11	CARBON	1.8K	5%	1/4W
R1127	1-249-440-11	CARBON	82K	5%	1/4W
R1128	1-249-412-11	CARBON	390	5%	1/4W
R1129	1-249-427-11	CARBON	6.8K	5%	1/4W
R1130	1-247-862-11	CARBON	20K	5%	1/4W
R1131	1-249-434-11	CARBON	27K	5%	1/4W
R1132	1-249-412-11	CARBON	390	5%	1/4W
R1135	1-249-433-11	CARBON	22K	5%	1/4W
R1136	1-249-412-11	CARBON	390	5%	1/4W
R1137	1-249-412-11	CARBON	390	5%	1/4W
R1138	1-249-412-11	CARBON	390	5%	1/4W
R1139	1-249-417-11	CARBON	1K	5%	1/4W
R1141	1-249-437-11	CARBON	47K	5%	1/4W
R1142	1-249-412-11	CARBON	390	5%	1/4W
R1143	1-249-427-11	CARBON	6.8K	5%	1/4W
R1145	1-249-412-11	CARBON	390	5%	1/4W
R1149	1-247-874-11	CARBON	62K	5%	1/4W
R1152	1-249-417-11	CARBON	1K	5%	1/4W
R1154	1-249-441-11	CARBON	100K	5%	1/4W
R1155	1-249-433-11	CARBON	22K	5%	1/4W
R1156	1-249-424-11	CARBON	3.9K	5%	1/4W
R1157	1-249-441-11	CARBON	100K	5%	1/4W
R1158	1-249-427-11	CARBON	6.8K	5%	1/4W
R1159	1-249-412-11	CARBON	390	5%	1/4W
R1160	1-249-417-11	CARBON	1K	5%	1/4W
R1161	1-249-441-11	CARBON	100K	5%	1/4W
R1164	1-249-431-11	CARBON	15K	5%	1/4W
R1165	1-249-439-11	CARBON	68K	5%	1/4W
R1166	1-249-423-11	CARBON	3.3K	5%	1/4W
R1167	1-249-440-11	CARBON	82K	5%	1/4W
R1168	1-249-412-11	CARBON	390	5%	1/4W
R1169	1-249-427-11	CARBON	6.8K	5%	1/4W
R1170	1-247-862-11	CARBON	20K	5%	1/4W
R1172	1-249-433-11	CARBON	22K	5%	1/4W
R1173	1-249-421-11	CARBON	2.2K	5%	1/4W
R1174	1-249-425-11	CARBON	4.7K	5%	1/4W
R1176	1-249-420-11	CARBON	1.8K	5%	1/4W
R1177	1-249-440-11	CARBON	82K	5%	1/4W

PANEL

PANEL (A)

Ref. No.	Part No.	Description	Remark
R1178	1-249-412-11	CARBON	390 5% 1/4W
R1179	1-249-427-11	CARBON	6.8K 5% 1/4W
R1180	1-247-862-11	CARBON	20K 5% 1/4W
R1181	1-249-434-11	CARBON	27K 5% 1/4W
R1183	1-249-437-11	CARBON	47K 5% 1/4W
R1184	1-249-437-11	CARBON	47K 5% 1/4W
R1185	1-249-437-11	CARBON	47K 5% 1/4W
R1189	1-249-417-11	CARBON	1K 5% 1/4W
R1191	1-249-437-11	CARBON	47K 5% 1/4W
R1192	1-249-412-11	CARBON	390 5% 1/4W
R1193	1-249-427-11	CARBON	6.8K 5% 1/4W
R1194	1-249-433-11	CARBON	22K 5% 1/4W
R1195	1-249-425-11	CARBON	4.7K 5% 1/4W
R1196	1-249-425-11	CARBON	4.7K 5% 1/4W
R1199	1-247-874-11	CARBON	62K 5% 1/4W
R1501	1-249-418-11	CARBON	1.2K 5% 1/4W
R1502	1-247-881-00	CARBON	120K 5% 1/4W
R1503	1-247-881-00	CARBON	120K 5% 1/4W
R1551	1-249-406-11	CARBON	120 5% 1/4W (AEP1)
R1551	1-247-807-31	CARBON	100 5% 1/4W
		(EXCEPT AEP1)	
R1552	1-249-436-11	CARBON	39K 5% 1/4W
R1553	1-249-436-11	CARBON	39K 5% 1/4W
R1554	1-249-423-11	CARBON	3.3K 5% 1/4W
R1555	1-249-423-11	CARBON	3.3K 5% 1/4W
		< COMPOSITION CIRCUIT BLOCK >	
RP601	1-239-598-11	COMPOSITION CIRCUIT BLOCK	
RP602	1-232-998-11	COMPOSITION CIRCUIT BLOCK	
		< VARIABLE RESISTOR >	
RV1101	1-223-251-11	RES. VAR. CARBON 100K/100K (SURROUND)	
RV1102	1-223-251-11	RES. VAR. CARBON 100K/100K (DBFB)	
RV1109	1-241-350-11	RES. VAR. CARBON 100K/100K (VOLUME)	
		< SWITCH >	
S601	1-554-303-21	SWITCH, TACTILE (BAND)	
S602	1-554-303-21	SWITCH, TACTILE (SHIFT)	
S603	1-554-303-21	SWITCH, TACTILE (- (DUAL MODE TUNING))	
S604	1-554-303-21	SWITCH, TACTILE (+ (DUAL MODE TUNING))	
S605	1-554-303-21	SWITCH, TACTILE (1 (PRESET STATION))	
S606	1-554-303-21	SWITCH, TACTILE (2 (PRESET STATION))	
S607	1-554-303-21	SWITCH, TACTILE (3 (PRESET STATION))	
S608	1-554-303-21	SWITCH, TACTILE (4 (PRESET STATION))	
S609	1-554-303-21	SWITCH, TACTILE (5 (PRESET STATION))	
S610	1-554-303-21	SWITCH, TACTILE (6 (PRESET STATION))	
S611	1-554-303-21	SWITCH, TACTILE (7 (PRESET STATION))	
S612	1-554-303-21	SWITCH, TACTILE (8 (PRESET STATION))	
S613	1-554-303-21	SWITCH, TACTILE (9 (PRESET STATION))	

Ref. No.	Part No.	Description	Remark
S614	1-554-303-21	SWITCH, TACTILE (0 (PRESET STATION))	
S615	1-554-303-21	SWITCH, TACTILE (POWER)	
S616	1-554-303-21	SWITCH, TACTILE (MEMORY)	
S617	1-554-303-21	SWITCH, TACTILE (STEREO/MONO)	
S619	1-554-303-21	SWITCH, TACTILE (VIDEO)	
S620	1-554-303-21	SWITCH, TACTILE (TAPE)	
S621	1-554-303-21	SWITCH, TACTILE (CD)	
S622	1-554-303-21	SWITCH, TACTILE (TUNER)	
S623	1-554-303-21	SWITCH, TACTILE (PHONO)	
S625	1-554-303-21	SWITCH, TACTILE (FLAT)	
S626	1-554-303-21	SWITCH, TACTILE (DANCE)	
S627	1-554-303-21	SWITCH, TACTILE (POPS)	
S628	1-554-303-21	SWITCH, TACTILE (ROCK)	
S629	1-554-303-21	SWITCH, TACTILE (CLASSIC)	
		< VIBRATOR >	
X601	1-567-775-11	VIBRATOR, CERAMIC (4.19MHz)	

*	1-650-780-11	PANEL (A) BOARD	

		< CONNECTOR >	
CN951	1-750-414-11	CONNECTOR, FFC/FPC 9P	
		< DIODE >	
D982	8-719-046-42	LED SEL5421E-TH8C (▷)	
D983	8-719-046-42	LED SEL5421E-TH8C (◁)	
		< RESISTOR >	
R981	1-247-811-31	CARBON	150 5% 1/4W
R982	1-249-409-11	CARBON	220 5% 1/4W
R983	1-249-415-11	CARBON	680 5% 1/4W
R984	1-249-417-11	CARBON	1K 5% 1/4W
R985	1-249-426-11	CARBON	5.6K 5% 1/4W
R986	1-249-430-11	CARBON	12K 5% 1/4W
		< SWITCH >	
S901	1-554-303-21	SWITCH, TACTILE (■)	
S902	1-554-303-21	SWITCH, TACTILE (▷)	
S903	1-554-303-21	SWITCH, TACTILE (◁)	
S904	1-554-303-21	SWITCH, TACTILE (◀ (AMS))	
S905	1-554-303-21	SWITCH, TACTILE (▶ (AMS))	
S906	1-572-269-11	SWITCH, SLIDE (DOLBY NR)	
S907	1-572-268-11	SWITCH, SLIDE (DIRECTION MODE)	

PANEL (B)

POWER AMPLIFIER

Ref. No.	Part No.	Description	Remark
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*	1-650-781-11	PANEL (B) BOARD *****	
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< CONNECTOR >

CN952	1-750-454-11	CONNECTOR, FFC/FPC 13P	
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< DIODE >

D991	8-719-046-46	LED SEL5221S-TH8C (●)	
D992	8-719-046-38	LED SEL5821A-TH8C (II)	
D994	8-719-046-42	LED SEL5421E-TH8C (▷)	
D995	8-719-046-42	LED SEL5421E-TH8C (◁)	
D997	8-719-046-46	LED SEL5221S-TH8C (NORMAL)	

D998	8-719-046-46	LED SEL5221S-TH8C (HIGH)	
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< RESISTOR >

R990	1-247-811-31	CARBON	150	5%	1/4W
R991	1-249-409-11	CARBON	220	5%	1/4W
R992	1-249-411-11	CARBON	330	5%	1/4W
R993	1-249-413-11	CARBON	470	5%	1/4W
R994	1-249-411-11	CARBON	330	5%	1/4W

R995	1-249-413-11	CARBON	470	5%	1/4W
R996	1-249-415-11	CARBON	680	5%	1/4W
R997	1-249-417-11	CARBON	1K	5%	1/4W
R998	1-249-420-11	CARBON	1.8K	5%	1/4W

< SWITCH >

S951	1-554-303-21	SWITCH, TACTILE (■)	
S952	1-554-303-21	SWITCH, TACTILE (II (PAUSE))	
S953	1-554-303-21	SWITCH, TACTILE (▷)	
S954	1-554-303-21	SWITCH, TACTILE (◁)	
S955	1-554-303-21	SWITCH, TACTILE (○ (REC MUTE))	

S956	1-554-303-21	SWITCH, TACTILE (◀ (AMS))	
S957	1-554-303-21	SWITCH, TACTILE (▶ (AMS))	
S958	1-554-303-21	SWITCH, TACTILE (● (REC))	
S959	1-554-303-21	SWITCH, TACTILE (HIGH (DUBBING SPEED))	
S960	1-554-303-21	SWITCH, TACTILE (NORMAL (DUBBING SPEED))	

Ref. No.	Part No.	Description	Remark
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*	A-4365-948-A	POWER AMPLIFIER BOARD, COMPLETE (AEP2, AEP3, EE)	
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*	A-4365-954-A	POWER AMPLIFIER BOARD, COMPLETE (E, AUS)	
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*	A-4371-100-A	POWER AMPLIFIER BOARD, COMPLETE (AEP1)	
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< CAPACITOR >

C1201	1-126-163-11	ELECT	4.7uF	20%	50V
C1202	1-164-075-11	CERAMIC	150PF	10%	50V
C1203	1-164-077-11	CERAMIC	220PF	10%	50V
C1204	1-124-126-00	ELECT	47uF	20%	10V
C1205	1-124-910-11	ELECT	47uF	20%	50V

C1206	1-124-122-11	ELECT	100uF	20%	50V
C1208	1-124-916-11	ELECT	22uF	20%	63V
C1210	1-137-375-11	FILM	0.068uF	5%	50V
C1211	1-137-375-11	FILM	0.068uF	5%	50V
C1220	1-126-176-11	ELECT	220uF	20%	10V

C1251	1-126-163-11	ELECT	4.7uF	20%	50V
C1252	1-164-075-11	CERAMIC	150PF	10%	50V
C1253	1-164-077-11	CERAMIC	220PF	10%	50V
C1254	1-124-126-00	ELECT	47uF	20%	10V
C1255	1-124-910-11	ELECT	47uF	20%	50V

C1256	1-124-122-11	ELECT	100uF	20%	50V
C1260	1-137-375-11	FILM	0.068uF	5%	50V
C1261	1-137-375-11	FILM	0.068uF	5%	50V

< CONNECTOR >

* CN1203	1-564-518-11	PLUG, CONNECTOR 3P	
CN1204	1-764-331-11	PIN, CONNECTOR (PCB) (V TYPE) 8P	

< DIODE >

D1201	8-719-987-63	DIODE	1N4148M
D1202	8-719-987-63	DIODE	1N4148M
D1203	8-719-987-63	DIODE	1N4148M
D1251	8-719-987-63	DIODE	1N4148M

< IC >

IC1201	8-749-920-09	IC	STK-4152MK2K (EXCEPT E, AUS) (AEP, EE)
IC1201	8-749-920-10	IC	STK4172MK2 (E, AUS)

< TRANSISTOR >

Q1201	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
Q1251	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA

< RESISTOR >

R1201	1-249-417-11	CARBON	1K	5%	1/4W
R1202	1-249-438-11	CARBON	56K	5%	1/4W
R1203	1-249-417-11	CARBON	1K	5%	1/4W
R1204	1-249-438-11	CARBON	56K	5%	1/4W

POWER AMPLIFIER**POWER SUPPLY (A)****POWER SUPPLY (B)**

Ref. No.	Part No.	Description			Remark
R1205	1-249-425-11	CARBON (EXCEPT E, AUS)	4.7K	5%	1/4W
R1205	1-249-427-11	CARBON	6.8K	5%	1/4W (E, AUS)
R1206	1-249-425-11	CARBON (EXCEPT E, AUS)	4.7K	5%	1/4W
R1206	1-249-427-11	CARBON	6.8K	5%	1/4W (E, AUS)
R1207	1-249-425-11	CARBON (EXCEPT E, AUS)	4.7K	5%	1/4W
R1207	1-249-427-11	CARBON	6.8K	5%	1/4W (E, AUS)
R1208	1-249-425-11	CARBON (EXCEPT E, AUS)	4.7K	5%	1/4W
R1208	1-249-427-11	CARBON	6.8K	5%	1/4W (E, AUS)
△R1209	1-212-881-11	FUSIBLE	100	5%	1/4W F
△R1210	1-217-151-00	METAL PLATE	0.22		2W F
R1211	1-249-417-11	CARBON	1K	5%	1/4W
R1212	1-249-431-11	CARBON	15K	5%	1/4W
R1213	1-249-441-11	CARBON	100K	5%	1/4W
R1214	1-249-421-11	CARBON	2.2K	5%	1/4W
R1215	1-249-421-11	CARBON	2.2K	5%	1/4W
R1216	1-249-421-11	CARBON	2.2K	5%	1/4W
R1217	1-249-421-11	CARBON	2.2K	5%	1/4W
R1218	1-249-397-11	CARBON	22	5%	1/4W
R1219	1-249-397-11	CARBON	22	5%	1/4W
R1227	1-249-429-11	CARBON	10K	5%	1/4W
R1228	1-249-441-11	CARBON	100K	5%	1/4W
R1230	1-249-428-11	CARBON	8.2K	5%	1/4W (E, AUS)
R1230	1-249-429-11	CARBON (EXCEPT E, AUS)	10K	5%	1/4W
△R1243	1-249-383-11	CARBON	1.5	5%	1/6W F
R1251	1-249-417-11	CARBON	1K	5%	1/4W
R1252	1-249-438-11	CARBON	56K	5%	1/4W
R1253	1-249-417-11	CARBON	1K	5%	1/4W
R1254	1-249-438-11	CARBON	56K	5%	1/4W
R1255	1-249-425-11	CARBON (EXCEPT E, AUS)	4.7K	5%	1/4W
R1255	1-249-427-11	CARBON	6.8K	5%	1/4W (E, AUS)
R1256	1-249-425-11	CARBON (EXCEPT E, AUS)	4.7K	5%	1/4W
R1256	1-249-427-11	CARBON	6.8K	5%	1/4W (E, AUS)
R1257	1-249-425-11	CARBON (EXCEPT E, AUS)	4.7K	5%	1/4W
R1257	1-249-427-11	CARBON	6.8K	5%	1/4W (E, AUS)
R1258	1-249-425-11	CARBON (EXCEPT E, AUS)	4.7K	5%	1/4W
R1258	1-249-427-11	CARBON	6.8K	5%	1/4W (E, AUS)
△R1259	1-212-881-11	FUSIBLE	100	5%	1/4W F
△R1260	1-217-151-00	METAL PLATE	0.22		2W F
R1261	1-249-417-11	CARBON	1K	5%	1/4W
R1262	1-249-431-11	CARBON	15K	5%	1/4W
R1263	1-249-441-11	CARBON	100K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R1268	1-249-397-11	CARBON	22	5%	1/4W
R1269	1-249-397-11	CARBON	22	5%	1/4W

*	1-650-840-12	POWER SUPPLY (A) BOARD			*****
< CONNECTOR >					
*	CN1301	1-564-321-00 PIN, CONNECTOR 2P (EXCEPT E)			
	CN1301	1-535-139-00 BASE POST 14MM (10MM PITCH) 2P (E)			
< SWITCH >					
△	VS1301	1-570-046-21 SWITCH, VOLTAGE CHANGE (VOLTAGE SELECTOR)			*****

*	1-650-841-12	POWER SUPPLY (B) BOARD			*****

	1-533-217-31	HOLDER, FUSE			
< FUSE >					
△	F1301	1-532-350-00 FUSE (4A/125V)			
△	F1302	1-532-350-00 FUSE (4A/125V)			
△	F1303	1-532-286-00 FUSE (2.5A)			
△	F1304	1-532-286-00 FUSE (2.5A)			*****

The components identified by
mark △ or dotted line with mark
△ are critical for safety.
Replace only with part number
specified.

Ref. No.	Part No.	Description	Remark
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MISCELLANEOUS

△3	1-558-943-51	CORD, POWER (E)	
△4	1-569-007-11	ADAPTOR, CONVERSION 2P (E3)	
△5	1-575-651-11	CORD, POWER (AEP, EE)	
△6	1-696-848-21	CORD, POWER (AUS)	
8	1-765-176-11	WIRE (FLAT TYPE) (26 CORE)	
59	1-751-747-11	WIRE (FLAT TYPE) (23 CORE)	
60	1-590-459-11	WIRE, FLAT TYPE (11 CORE)	
106	1-590-485-11	WIRE, FLAT TYPE (7 CORE)	
116	1-751-025-11	WIRE (FLAT TYPE) (9 CORE)	
117	1-751-210-11	WIRE (FLAT TYPE) (13 CORE)	
* 261	1-452-538-11	MAGNET	
304	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
△307	8-848-144-11	DEVICE, OPTICAL KSS-240A	
△F1301	1-532-350-00	FUSE (4A/125V)	
△F1302	1-532-350-00	FUSE (4A/125V)	
△F1303	1-532-286-00	FUSE (2.5A)	
△F1304	1-532-286-00	FUSE (2.5A)	
HP101	A-2003-757-A	BASE ASSY, HEAD (DECK A)	
HRPE101	A-2003-930-A	BASE ASSY, HEAD (DECK B)	
M101	X-3365-377-1	MOTOR ASSY (CAPSTAN) (DECK A)	
M101	X-4917-504-1	MOTOR ASSY (SLED)	
M102	X-3363-501-1	MOTOR ASSY (REEL) (DECK A)	
M102	X-4917-523-4	MOTOR ASSY (SPINDLE)	
M103	X-3365-377-1	MOTOR ASSY (CAPSTAN) (DECK B)	
M104	X-3363-501-1	MOTOR ASSY (REEL) (DECK B)	
M151	A-4604-363-A	MOTOR (L) ASSY	
Q1351	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q1352	8-729-209-15	TRANSISTOR 2SD2012	
△T1301	1-423-925-11	TRANSFORMER, POWER (AEP, EE)	
△T1301	1-423-926-11	TRANSFORMER, POWER (E, AUS)	

Ref. No.	Part No.	Description	Remark
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HARDWARE LIST

#1	7-621-255-15	SCREW +P 2X3	
#2	7-621-775-00	SCREW +B 2.6X3	
#3	7-621-775-10	SCREW +B 2.6X4	
#4	7-621-849-00	SCREW, TAPPING	
#5	7-627-556-08	SCREW +P 2.6X2.8	
#6	7-682-547-09	SCREW +BVTT 3X6 (S)	
#7	7-682-548-04	SCREW +BVTT 3X8 (S)	
#8	7-682-560-04	SCREW +BVTT 4X6 (S)	
#9	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S (E)	
#10	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#11	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3	

ACCESSORIES & PACKING MATERIALS

1-467-491-11	COMMANDER, STANDARD (RM-S321)
1-501-374-11	ANTENNA, LOOP (AEP1, AEP2, EE)
1-501-536-11	ANTENNA (AEP1, AEP2, EE)
2-181-754-21	COVER (MLY), BATTERY (For RM-S321)
3-758-164-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (AEP2)
3-758-164-31	MANUAL, INSTRUCTION (DANISH, FINNISH) (AEP1)
3-758-164-41	MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN) (AEP2)
3-758-164-61	MANUAL, INSTRUCTION (ENGLISH, GERMAN, POLISH) (EE)
3-758-164-71	MANUAL, INSTRUCTION (CZECH) (EE)
3-758-164-81	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (AEP1)
3-758-164-91	MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN) (AEP1)
*	4-963-204-01 CUSHION
*	4-963-778-01 INDIVIDUAL CARTON (AEP2)
*	4-963-779-01 INDIVIDUAL CARTON (EE)

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

PS-LX56/LX56P

SERVICE MANUAL



PHOTO : PS-LX56

PS-LX56/LX56P are the turntable section in LBT-A190/A195/A290/A290K/A295/A390/A390K/A395/A490/A490K/A495/D150/D250/D550/G1000/G2000.

US Model
Canadian Model
PX Model
Tourist Model
PS-LX56
AEP Model
E Model
Australian Model
PS-LX56/LX56P
UK Model
PS-LX56P

SPECIFICATIONS

Turntable

Platter
Motor
Drive system
Speed
Wow and flutter
Signal-to-noise ratio
Automatic system

(PS-LX56)

30cm (12 in.)
DC servo motor
Belt drive
33 1/3 rpm/45 rpm switchable
0.2% (WRMS)
60 dB (DIN-B)
Return, reject

Tonearm

Type
Pivot-to-stylus length
Overall arm length

Dynamically blanced
203 mm (8 in.)
235 mm (9 1/4 in.)

Cartridge

Type
Frequency response
Stylus

Moving magnet type
20 Hz-20kHz
CN-234

General

Dimensions

355 × 94 × 345 mm(w/h/d)
(14 × 3 3/4 × 13 5/8 inches)
Approx. 2.5 kg (5 lb 8 oz)

Weight

Power requirement

US and Canadian model : 120V AC, 60Hz
European model : 220-230V AC, 50/60Hz
Australian model : 240V AC, 50Hz
Model for other countries : 110-120V/220-240V
adjustable with the
voltage selector
AC, 50/60Hz

Power consumption
Accessory supplied
Optional accessories

2 W
45-rpm adaptor (1)
Replacement stylus CN-234
Stat spray XP-C10
Cleaner XP-C1, XP-C2

Turntable

Platter
Tone arm type
Cartridge type
Stylus
Mass
Dimensions

(PS-LX56P)

30 cm
Dynamically balanced
Moving magnet type
Sony CN-234 (0.6 mil diamond)
Approx. 2.3 kg (5 lb 1 oz)
Approx. 355 × 95 × 345 mm
(14 × 3 3/4 × 13 5/8 inches)
(w/h/d, including projections)

Design and specifications subject to change without notice.

Note

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

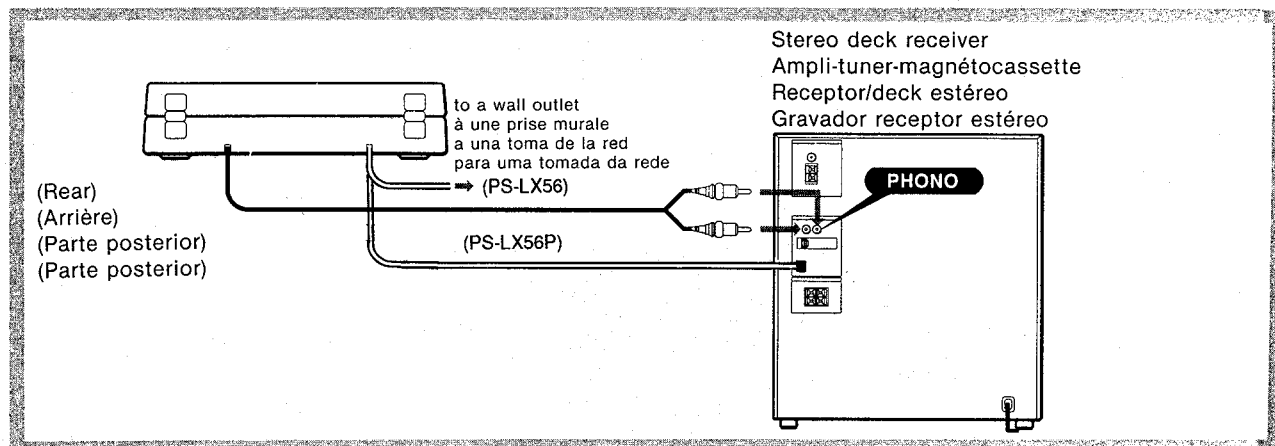
STEREO TURNTABLE SYSTEM
SONY®



Connections

Note

Connect the red plug to the right-channel jack (R), and the white plug to the left-channel jack (L).



Notes on installation

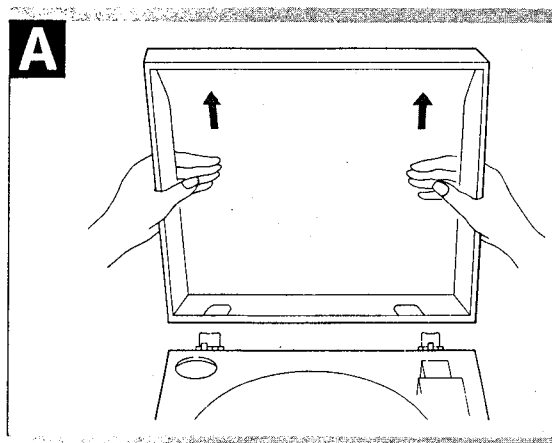
- Place the turntable on a level surface.
- Avoid placing the unit near electrical appliances (such as a television, hair dryer, or fluorescent lamp) which may cause hum or noise.
- Place the turntable where it will not be subject to any vibration, such as from speakers, slamming of doors, etc.
- Keep the unit away from direct sunlight, extremes of temperature, and excessive dust and moisture.

Nota

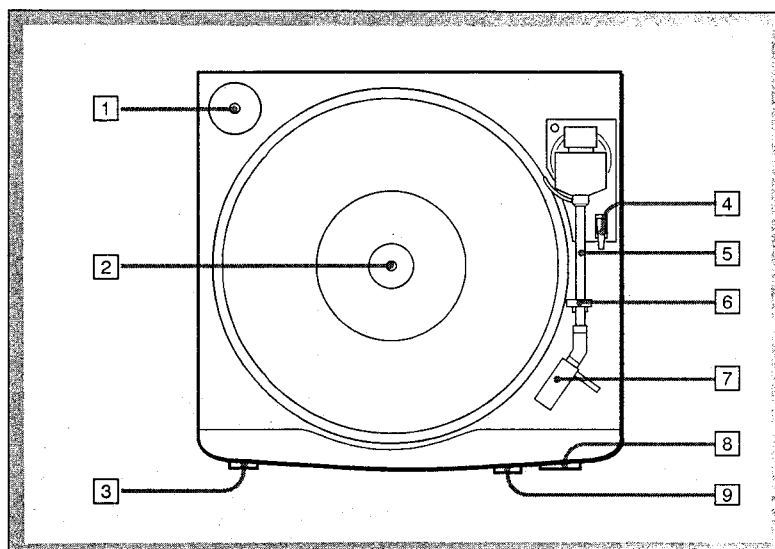
Conecte la clavija roja a la toma del canal derecho (R), y la blanca a la del canal izquierdo (L).

To remove the dust cover **A**

Open the cover fully and pull it up.

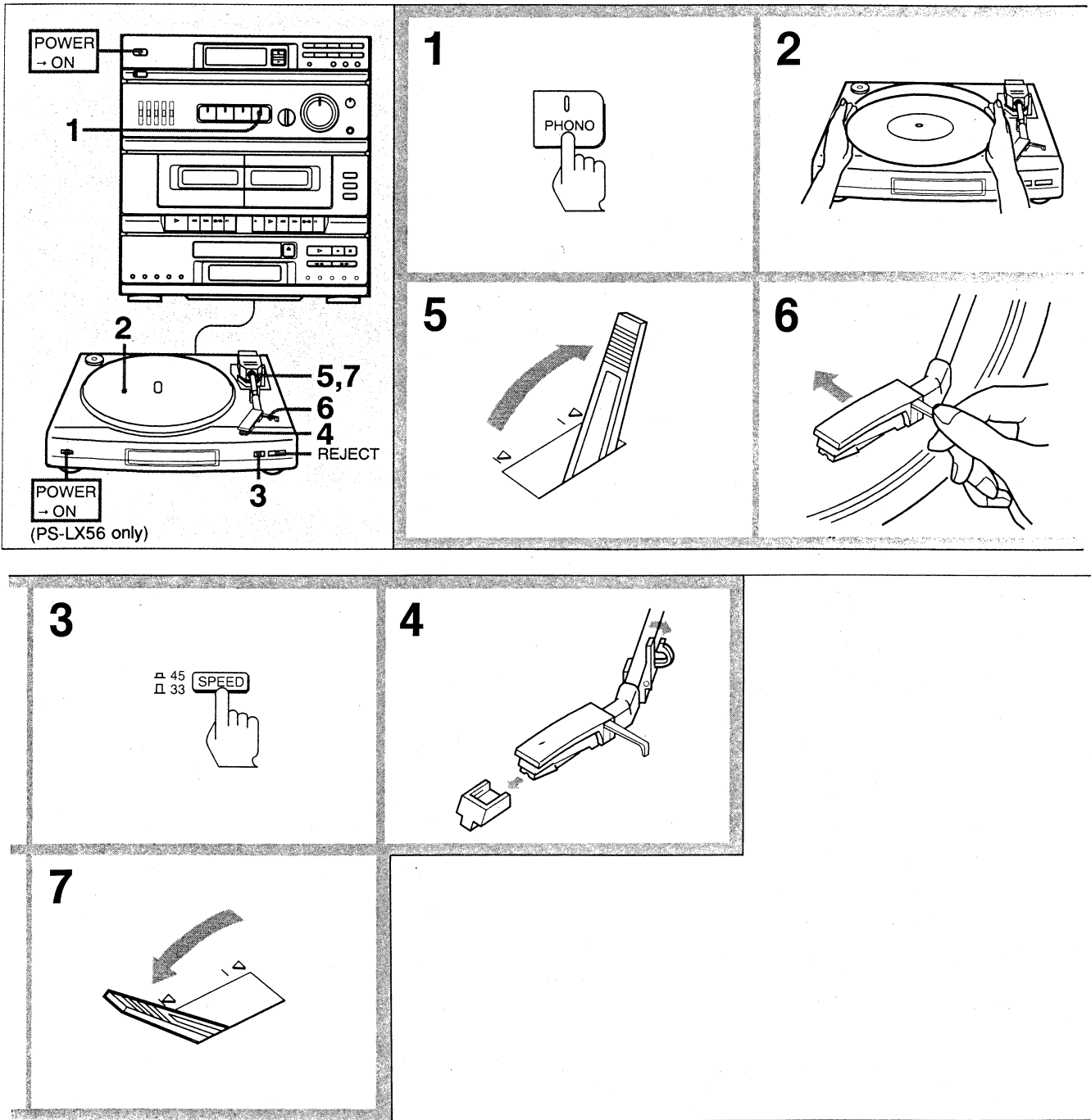


Location of Controls



- 1 45-rpm adaptor
- 2 Centre spindle
- 3 POWER switch (PS-LX56)
- 4 Cueing lever
- 5 Tonearm
- 6 Armrest
- 7 Cartridge
- 8 REJECT button
- 9 Speed selector

Playing Records



When the record is played to the end, the tonearm returns to the armrest and the turntable stops.

To stop during play, press REJECT.

To play a different part of the record

Lift the tonearm by setting the cueing level to ∇ , move the tonearm by hand to the desired point, then set the cueing lever to ∇ .

To play a 17-cm record

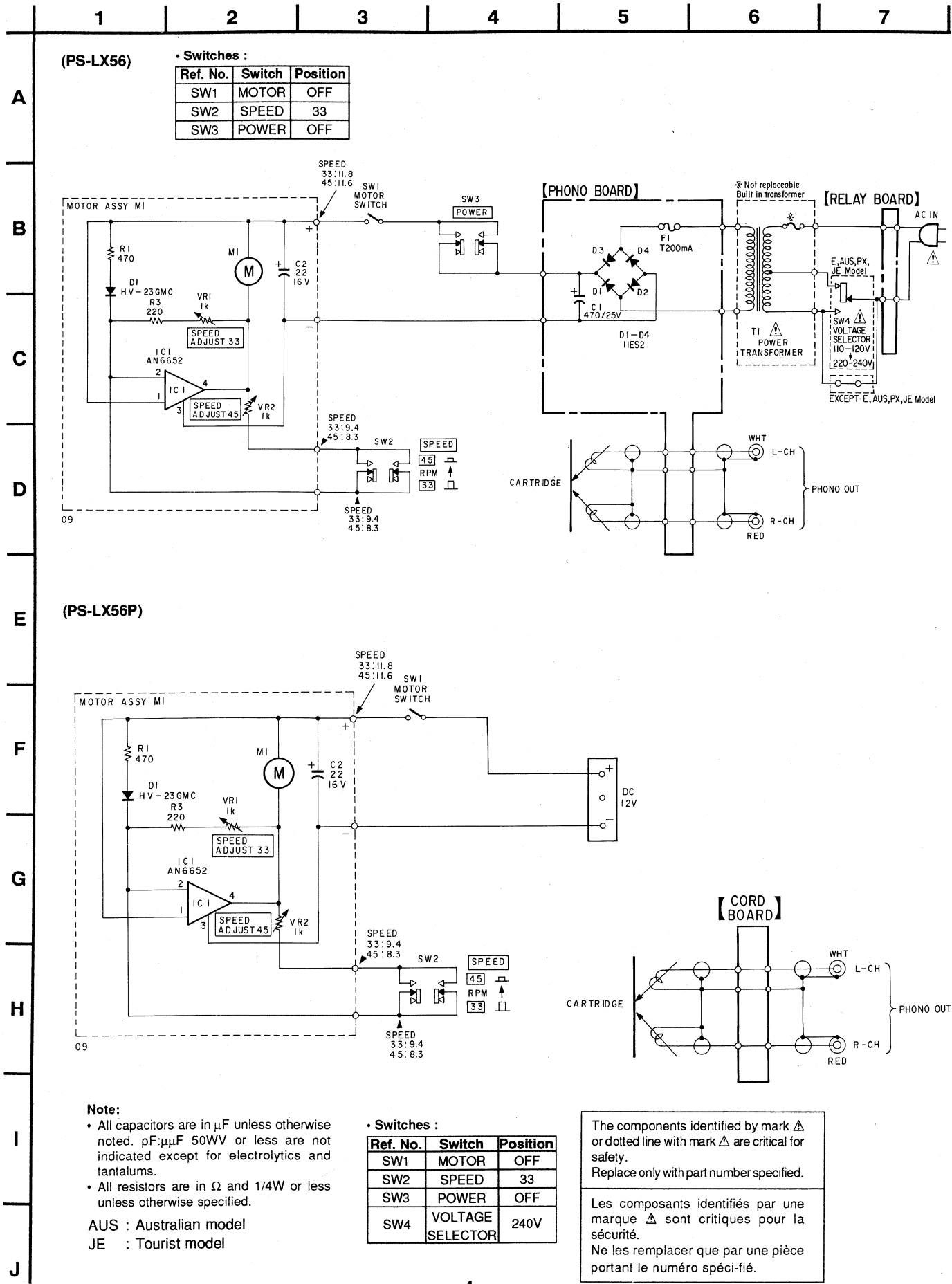
Use the supplied adaptor

If the tonearm moves outward when you move it close to the centre

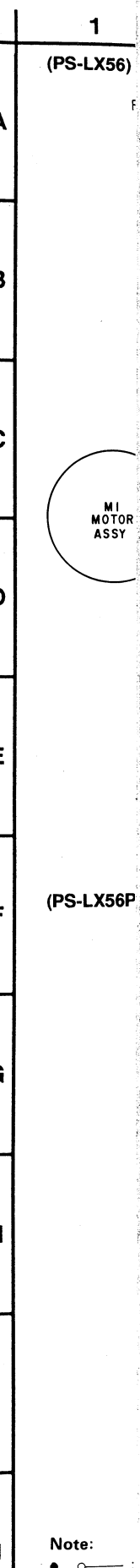
Do not resist this movement, as it may damage the automatic return mechanism.

If the tonearm does not return to its armrest Press REJECT.

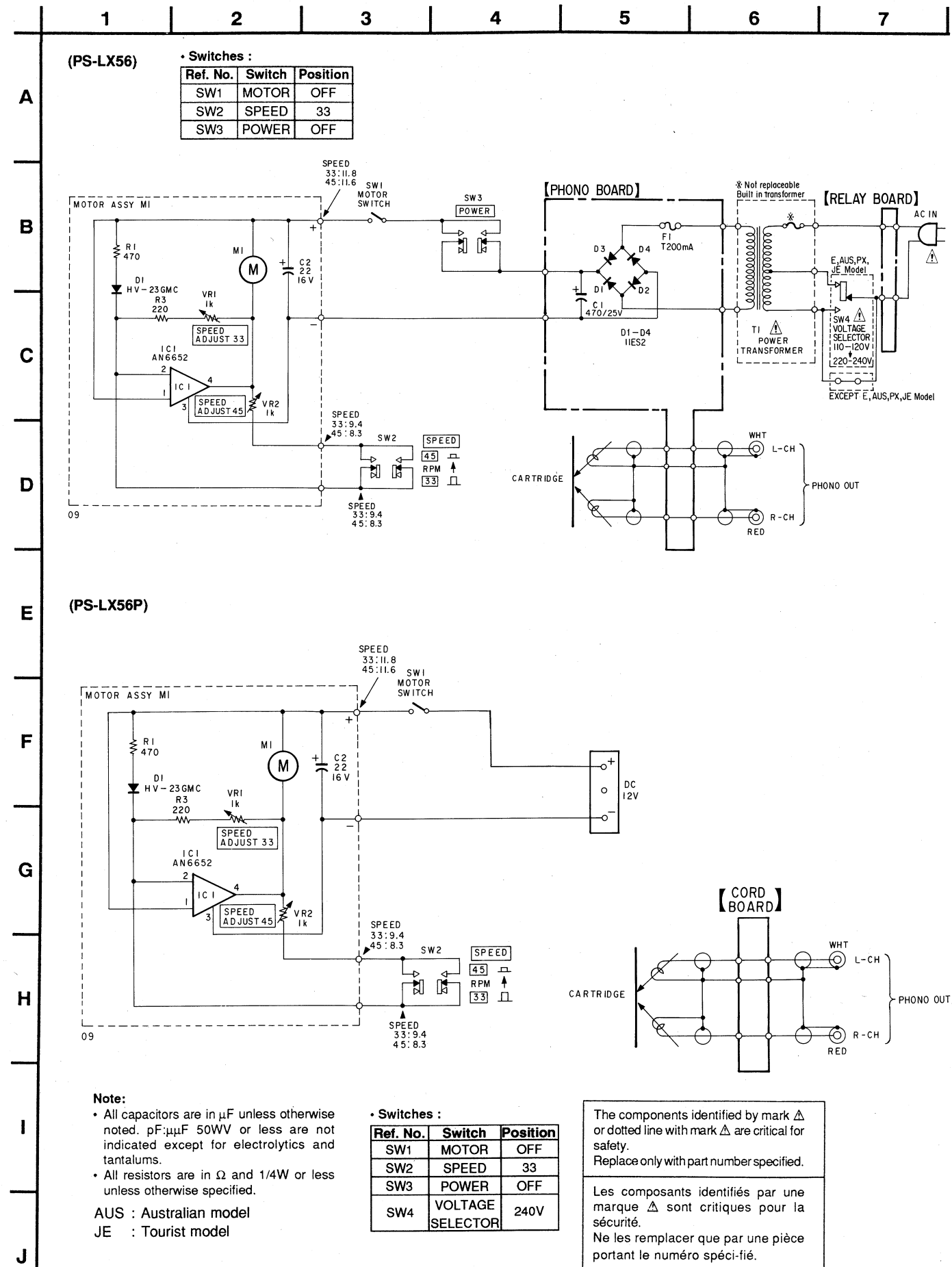
SCHEMATIC DIAGRAMS



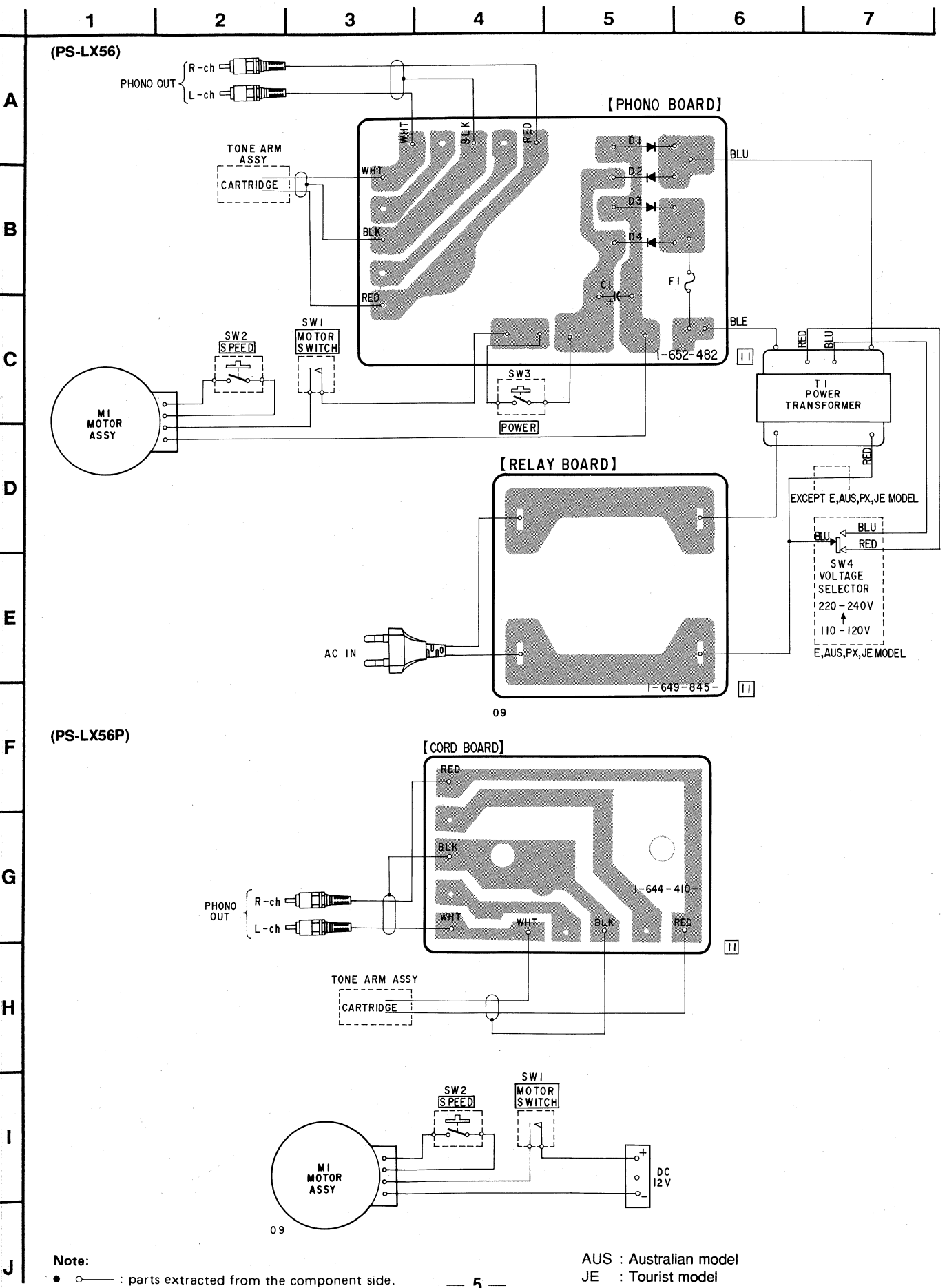
WIRING D



SCHEMATIC DIAGRAMS



WIRING DIAGRAMS



EXPLODED VIEW

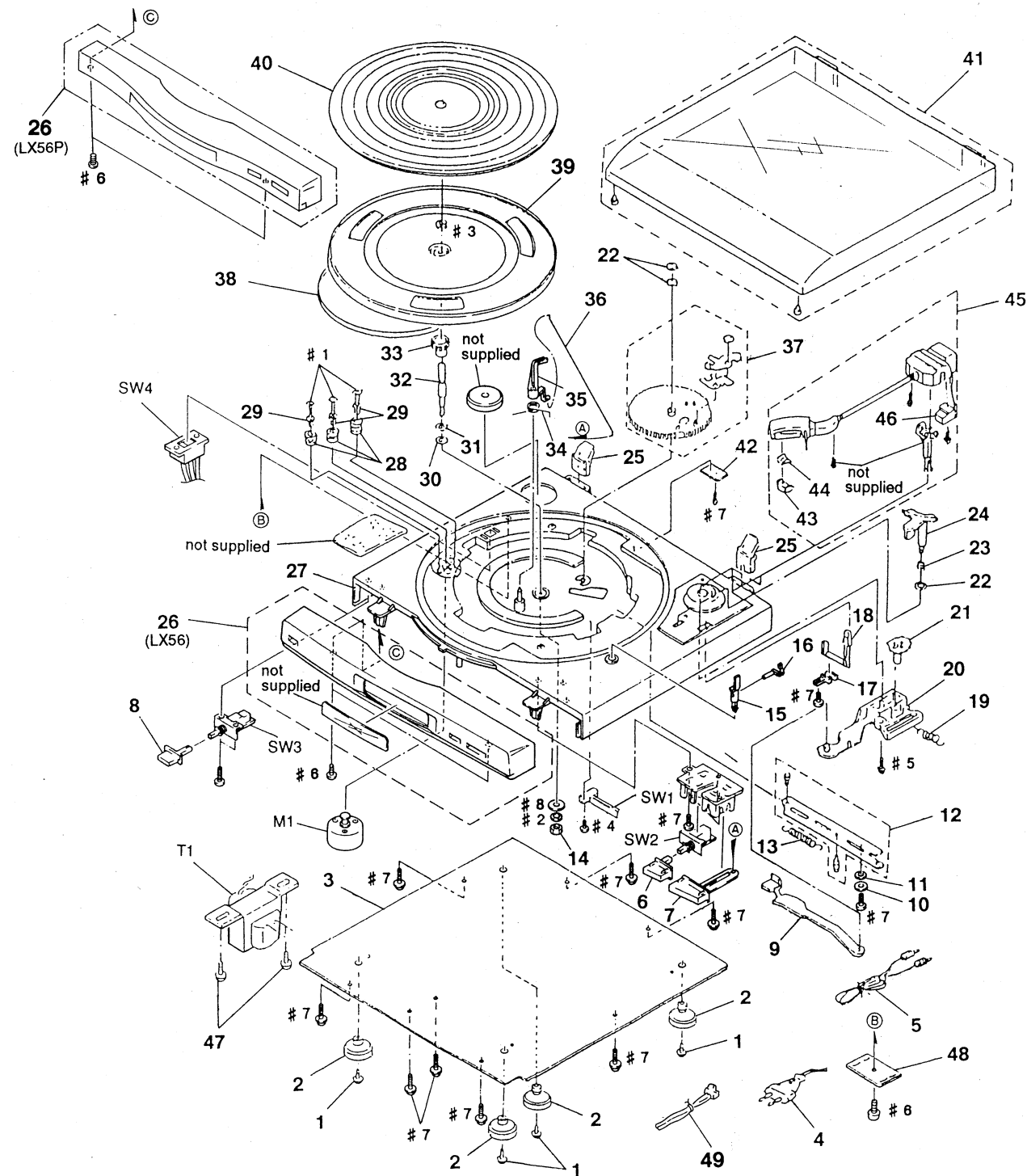
NOTE:

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

- AUS : Australian model
- CND : Canadian model
- EE : East European model
- IT : Italian model
- MX : Mexican model
- EA : Saudi Arabia model
- SP : Singapore model
- MY : Malaysia model
- JE : Tourist

The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-950-497-01	FOOT SEAT		M1	A-4604-945-A	MOTOR ASSY	
2	4-950-490-01	PLASTIC STAND		SW1	1-570-666-11	SWITCH (LEAF)	
* 3	4-961-804-01	BUTTON BOARD		SW2	1-571-089-11	SWITCH, PUSH (SPEED) (1 KEY)	
Δ 4	1-575-651-61	CORD, AC (LX56: AEP, EA, EE, IT, MX, MY, CIS, SP)		SW3	1-692-211-11	SWITCH, PUSH (POWER) (1 KEY) (LX56)	
Δ 4	1-575-975-11	CORD, AC (LX56: CND, US)		Δ SW4	1-692-835-11	VOLTAGE SELECTOR (LX-56: AUS, E, MX, MY, SP)	
Δ 4	1-590-074-11	CORD, AC (LX56: E)		Δ T1	1-450-987-11	TRANSFORMER, POWER (LX56: AEP, EE, IT, CIS)	
Δ 4	1-690-608-11	CORD, AC (LX56: AUS)		Δ T1	1-450-987-21	TRANSFORMER, POWER (LX56: AUS, E, PX, EA, JE, MX, SP)	
5	1-555-116-11	CORD, PHONO		Δ T1	1-450-987-31	TRANSFORMER, POWER (LX56: MY)	
6	4-964-177-01	KNOB SPEED		Δ T1	1-450-987-41	TRANSFORMER, POWER (LX56: U, CA)	
7	4-964-178-01	KNOB REJECT					
8	4-964-184-01	KNOB POWER (LX56)					
9	4-947-487-01	RETURN LINK					
10	4-890-173-00	WASHER					
11	3-659-350-00	WASHER					
12	A-4604-947-A	RETURN ASSY, LEVER					
13	4-947-485-01	SPRING (22)					
14	4-947-510-01	NUT					
15	4-947-491-01	ARM REST					
16	A-4660-499-A	ARM CLIP ASSY					
17	4-947-477-01	CUEING (BASE)					
18	4-947-468-01	LEVER, CUEING					
19	4-963-537-01	SPRING					
20	4-963-536-01	LINK RETURN					
21	4-963-535-01	ADJUST CAM					
22	4-947-514-01	4MM CS RING					
23	4-947-467-01	SPRING (6)					
24	4-947-466-01	TONE ARM ELEVATOR					
25	A-4660-498-A	HINGE ASSY					
26	A-4660-577-A	FRONT PANEL (G) ASSY (LX56: GRAY) (US)					
26	A-4660-578-A	FRONT PANEL (G) ASSY (LX56: BLACK)					
26	A-4660-976-A	FRONT PANEL (G) ASSY (LX56P)					
* 27	4-950-487-01	MAIN CABINET (B)					
28	4-947-505-01	CUSHION MOTOR					
29	4-947-504-01	COLLAR					
30	3-451-162-00	WASHER (56)					
31	3-701-445-21	WASHER					
32	4-947-498-01	STELL BALL					
33	4-947-497-01	GEAR					
34	4-947-496-01	SPRING (34)					
35	4-947-495-01	WIPER REJECT					
36	4-948-101-01	SPRING (38)					
37	A-4604-916-A	GEAR ASSY, SPUR					
38	4-947-503-01	BELT					
39	4-947-494-01	TURNTABLE PLATTER					
40	4-947-539-01	RUBBER MAT					
41	A-4604-946-A	DUST COVER ASSY					
* 42	1-652-482-11	PHONO BOARD (LX56)					
* 42	1-644-410-11	CORD BOARD (LX56P)					
43	4-948-095-01	COVER, CARTRIDGE					
44	4-951-290-01	STYLUS (CN-234)					
45	A-4604-940-A	ARM ASSY, TONE					
46	4-947-464-01	COUNTER WEIGHT					
47	4-952-961-01	SCREW (LX56)					
* 48	1-649-845-11	RELAY BOARD (LX56)					
49	1-557-109-21	CORD, DC (LX56P)					

ELECTR

NOTE:

- Due to sta list may b the diagra
- -XX, -X i have some
- RESISTO All resisto METAL: METAL C F : nonfla
- Items mar seldom re should be
- Hardware parts list.

Ref. No.

*

*

C1

D1

D2

D3

D4

 Δ F1

*

ed by mark
mark Δ are
art number
és par une
ues pour la
ar une pièce
é.

1



45

4

23

22

9

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-950-497-01	FOOT SEAT		M1	A-4604-945-A	MOTOR ASSY	
2	4-950-490-01	PLASTIC STAND		SW1	1-570-666-11	SWITCH (LEAF)	
* 3	4-961-804-01	BUTTON BOARD		SW2	1-571-089-11	SWITCH, PUSH (SPEED) (1 KEY)	
Δ 4	1-575-651-61	CORD, AC (LX56: AEP, EA, EE, IT, MX, MY, CIS, SP)		SW3	1-692-211-11	SWITCH, PUSH (POWER) (1 KEY) (LX56)	
Δ 4	1-575-975-11	CORD, AC (LX56: CND, US)		Δ SW4	1-692-835-11	VOLTAGE SELECTOR (LX-56: AUS, E, MX, MY, SP)	
Δ 4	1-590-074-11	CORD, AC (LX56: E)		Δ T1	1-450-987-11	TRANSFORMER, POWER (LX56: AEP, EE, IT, CIS)	
Δ 4	1-690-608-11	CORD, AC (LX56: AUS)		Δ T1	1-450-987-21	TRANSFORMER, POWER (LX56: AUS, E, PX, EA, JE, MX, SP)	
5	1-555-116-11	CORD, PHONO		Δ T1	1-450-987-31	TRANSFORMER, POWER (LX56: MY)	
6	4-964-177-01	KNOB SPEED		Δ T1	1-450-987-41	TRANSFORMER, POWER (LX56: U, CA)	
7	4-964-178-01	KNOB REJECT					
8	4-964-184-01	KNOB POWER (LX56)					
9	4-947-487-01	RETURN LINK					
10	4-890-173-00	WASHER					
11	3-659-350-00	WASHER					
12	A-4604-947-A	RETURN ASSY, LEVER					
13	4-947-485-01	SPRING (22)					
14	4-947-510-01	NUT					
15	4-947-491-01	ARM REST					
16	A-4660-499-A	ARM CLIP ASSY					
17	4-947-477-01	CUEING (BASE)					
18	4-947-468-01	LEVER, CUEING					
19	4-963-537-01	SPRING					
20	4-963-536-01	LINK RETURN					
21	4-963-535-01	ADJUST CAM					
22	4-947-514-01	4MM CS RING					
23	4-947-467-01	SPRING (6)					
24	4-947-466-01	TONE ARM ELEVATOR					
25	A-4660-498-A	HINGE ASSY					
26	A-4660-577-A	FRONT PANEL (G) ASSY (LX56: GRAY) (US)					
26	A-4660-578-A	FRONT PANEL (G) ASSY (LX56: BLACK)					
26	A-4660-976-A	FRONT PANEL (G) ASSY (LX56P)					
* 27	4-950-487-01	MAIN CABINET (B)					
28	4-947-505-01	CUSHION MOTOR					
29	4-947-504-01	COLLAR					
30	3-451-162-00	WASHER (56)					
31	3-701-445-21	WASHER					
32	4-947-498-01	STELL BALL					
33	4-947-497-01	GEAR					
34	4-947-496-01	SPRING (34)					
35	4-947-495-01	WIPER REJECT					
36	4-948-101-01	SPRING (38)					
37	A-4604-916-A	GEAR ASSY, SPUR					
38	4-947-503-01	BELT					
39	4-947-494-01	TURNTABLE PLATTER					
40	4-947-539-01	RUBBER MAT					
41	A-4604-946-A	DUST COVER ASSY					
* 42	1-652-482-11	PHONO BOARD (LX56)					
* 42	1-644-410-11	CORD BOARD (LX56P)					
43	4-948-095-01	COVER, CARTRIDGE					
44	4-951-290-01	STYLUS (CN-234)					
45	A-4604-940-A	ARM ASSY, TONE					
46	4-947-464-01	COUNTER WEIGHT					
47	4-952-961-01	SCREW (LX56)					
* 48	1-649-845-11	RELAY BOARD (LX56)					
49	1-557-109-21	CORD, DC (LX56P)					

CORD PHONO RELAY

ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Hardware (# mark) list is given in the last of this parts list.

- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA...: μ PA...,
uPB...: μ PB..., uPC...: μ PC...,
uPD...: μ PD...
- CAPACITORS
uF: μ F
- COILS
uH: μ H
- AUS: Australian model
- CND: Canadian model
- EE: East European model
- IT: Italian model
- MX: Mexican model
- EA: Saudi Arabia model
- SP: Singapore model
- MY: Malaysia model
- JE: Tourist

The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	1-644-410-11	CORD BOARD (LX56P)				ACCESSORIES & PACKING MATERIALS	
		*****				*****	
		*****				4-758-045-11	MANUAL INSTRUCTION (English, French, Spanish, Portuguese) (LX56 AEP, CND)
*	1-652-482-11	PHONO BOARD (LX56)				4-758-045-21	MANUAL INSTRUCTION (English) (LX56 US)
		*****				4-758-045-41	MANUAL INSTRUCTION (German, Dutch, Swedish, Italian) (LX56 AEP, IT)
		< CAPACITOR >				4-758-045-51	MANUAL INSTRUCTION (English, French, Spanish, Chinese) (LX56 AUS, E, PX, MX, EA, MY, SP, JE)
C1	1-126-012-11	ELECT 470uF	16V			4-758-045-61	MANUAL INSTRUCTION (English, German, Polish) (LX56 EE, CIS)
		< DIODE >					
D1	8-719-200-82	DIODE 11ES2		*	4-947-532-01	SNOW BOX (L)	
D2	8-719-200-82	DIODE 11ES2		*	4-947-533-01	SNOW BOX (R)	
D3	8-719-200-82	DIODE 11ES2					
D4	8-719-200-82	DIODE 11ES2					
		< FUSE >				*****	
Δ F1	1-532-613-XX	FUSE TIME-LAG (T200mA)				HARDWARE LIST	
		*****				*****	
*	1-649-845-11	RELAY BOARD (LX56)		#1	7-621-773-87	SCREW (64)	
		*****		#2	7-623-210-22	WASHER (57)	
		*****		#3	7-624-110-04	GMM E RING	
		*****		#4	7-685-105-01	SCREW (59)	
		*****		#5	7-685-645-79	SCREW (68)	
		*****		#6	7-685-646-79	SCREW (60)	
		*****		#7	7-685-647-79	SCREW (58)	
		*****		#8	7-688-005-01	WASHER (69)	

9-959-216-11

Sony Corporation
Audio Group

— 8 —

English
93K09102-1
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Published by Audio Sector Quality Assurance Dept.

PS-LX56/LX56P

SERVICE MANUAL

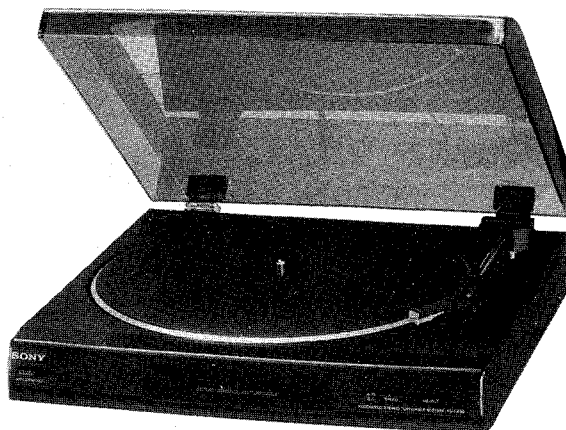


PHOTO : PS-LX56

PS-LX56/LX56P are the turntable section in LBT-A190/A195/A290/A290K/A295/A390/A390K/A395/A490/A490K/A495/D150/D250/D550/G1000/G2000.

US Model
Canadian Model
PX Model
Tourist Model
PS-LX56
AEP Model
E Model
Australian Model
PS-LX56/LX56P
UK Model
PS-LX56P

SPECIFICATIONS

Turntable

Platter 30cm (12 in.)
Motor DC servo motor
Drive system Belt drive
Speed 33 1/3 rpm/45 rpm switchable
Wow and flutter 0.2% (WRMS)
Signal-to-noise ratio 60 dB (DIN-B)
Automatic system Return, reject

Tonearm

Type Dynamically balanced
Pivot-to-stylus length 203 mm (8 in.)
Overall arm length 235 mm (9 1/4 in.)

Cartridge

Type Moving magnet type
Frequency response 20 Hz-20kHz
Stylus CN-234

General

Dimensions 355 × 94 × 345 mm(w/h/d)
(14 × 3 3/4 × 13 5/8 inches)
Approx. 2.5 kg (5 lb 8 oz)
Weight
Power requirement US and Canadian model : 120V AC, 60Hz
European model : 220-230V AC, 50/60Hz
Australian model : 240V AC, 50Hz
Model for other countries : 110-120V/220-240V
adjustable with the
voltage selector
AC, 50/60Hz

Power consumption 2 W
Accessory supplied 45-rpm adaptor (1)
Optional accessories Replacement stylus CN-234
Stat spray XP-C10
Cleaner XP-C1, XP-C2

Turntable

Platter 30 cm
Tone arm type Dynamically balanced
Cartridge type Moving magnet type
Stylus Sony CN-234 (0.6 mil diamond)
Mass Approx. 2.3 kg (5 lb 1 oz)
Dimensions Approx. 355 x 95 x 345 mm
(14 x 3 3/4 x 13 5/8 inches)
(w/h/d, including projections)

Design and specifications subject to change without notice.

Note

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

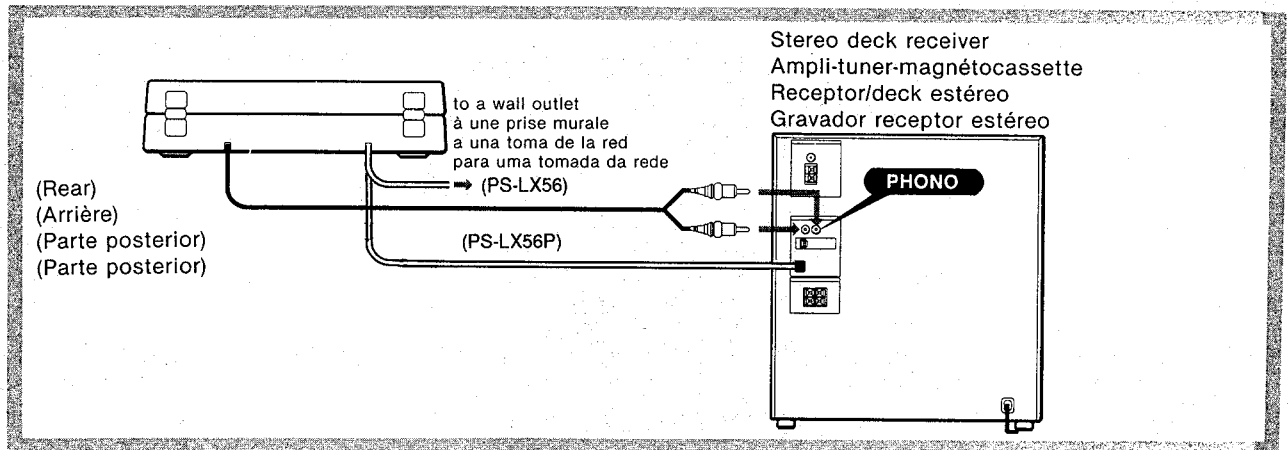
STEREO TURNTABLE SYSTEM
SONY®



Connections

Note

Connect the red plug to the right-channel jack (R), and the white plug to the left-channel jack (L).



Notes on installation

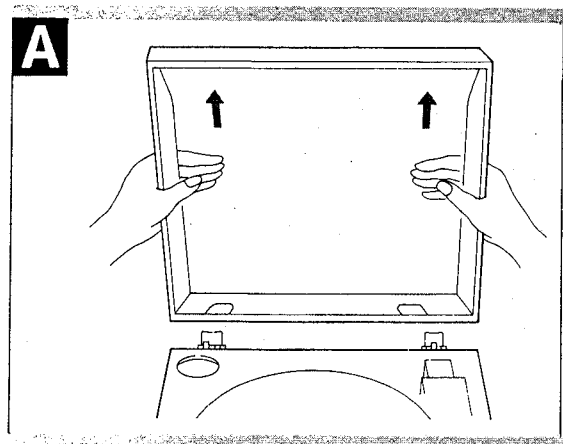
- Place the turntable on a level surface.
- Avoid placing the unit near electrical appliances (such as a television, hair dryer, or fluorescent lamp) which may cause hum or noise.
- Place the turntable where it will not be subject to any vibration, such as from speakers, slamming of doors, etc.
- Keep the unit away from direct sunlight, extremes of temperature, and excessive dust and moisture.

Nota

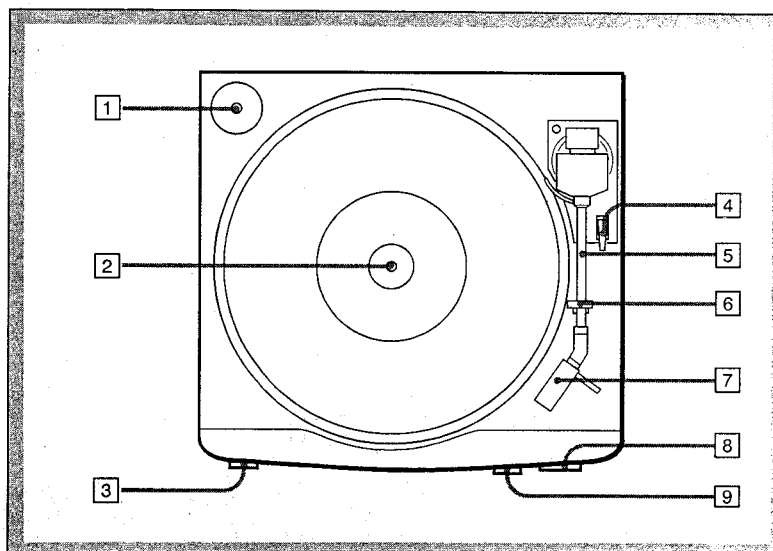
Conecte la clavija roja a la toma del canal derecho (R), y la blanca a la del canal izquierdo (L).

To remove the dust cover **A**

Open the cover fully and pull it up.

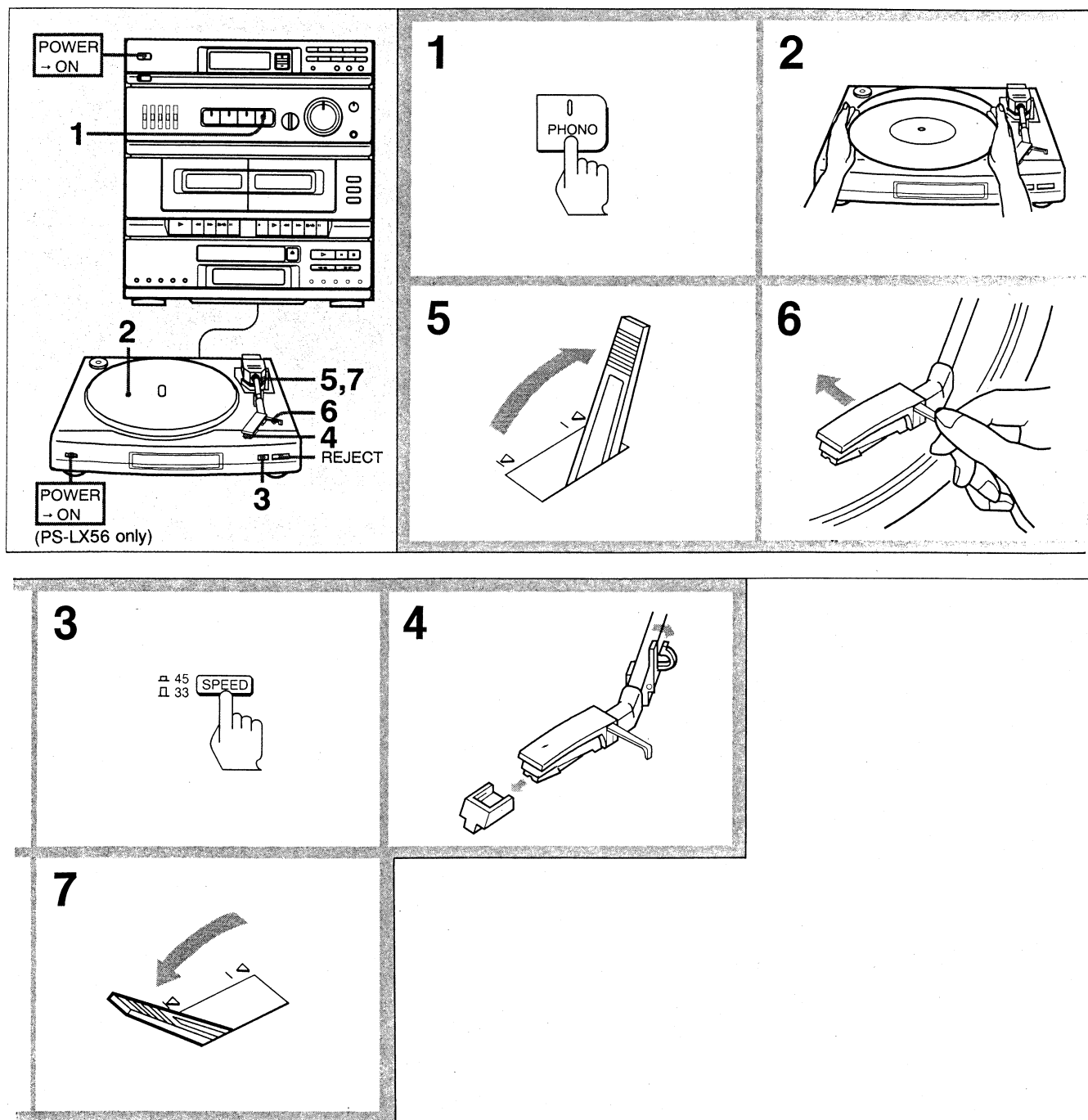


Location of Controls



- 1 45-rpm adaptor
- 2 Centre spindle
- 3 POWER switch (PS-LX56)
- 4 Cueing lever
- 5 Tonearm
- 6 Armrest
- 7 Cartridge
- 8 REJECT button
- 9 Speed selector

Playing Records



When the record is played to the end, the tonearm returns to the armrest and the turntable stops.

To stop during play, press REJECT.

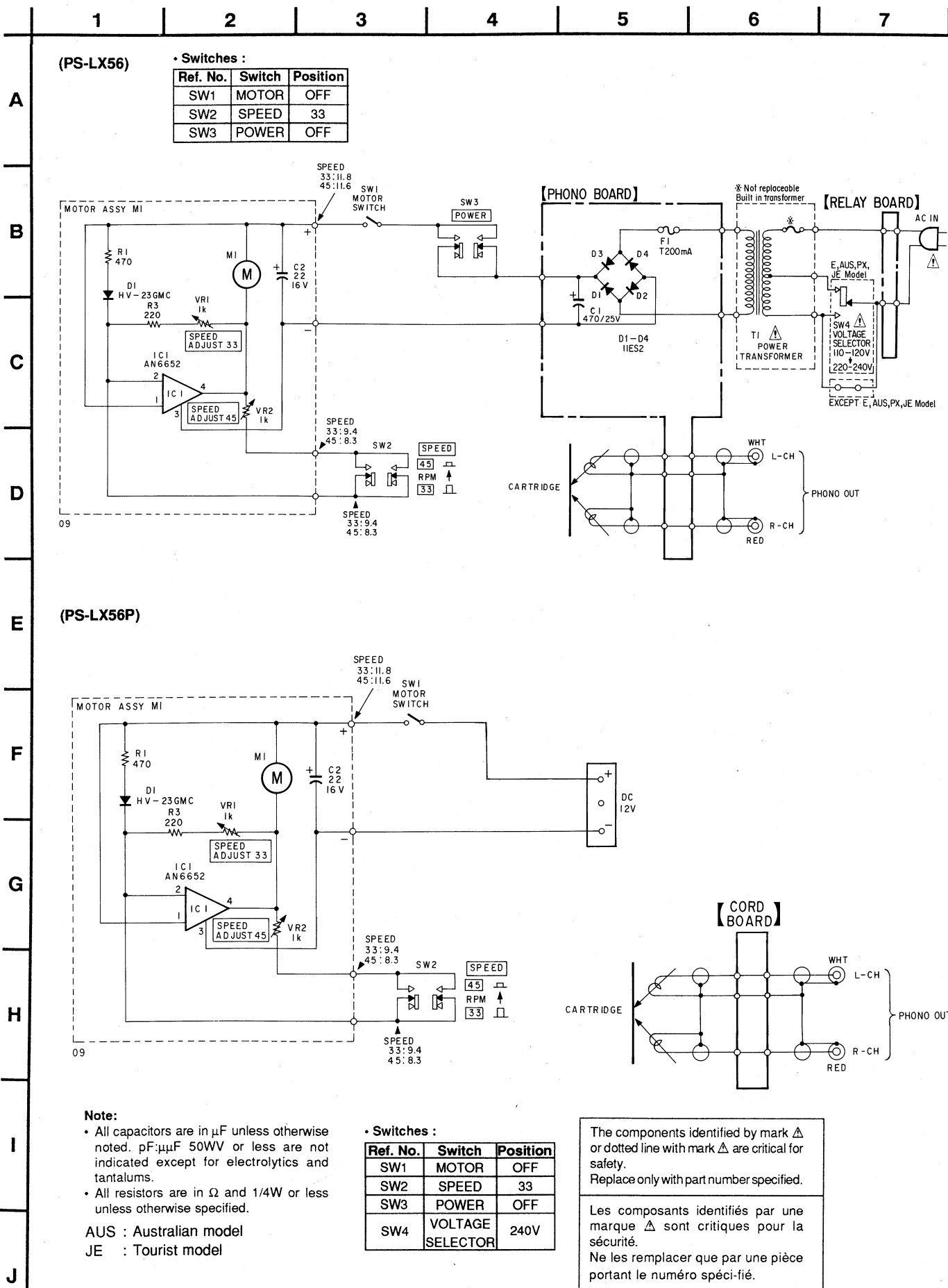
To play a different part of the record
Lift the tonearm by setting the cueing level to ▽, move the tonearm by hand to the desired point, then set the cueing lever to ▽.

To play a 17-cm record
Use the supplied adaptor

If the tonearm moves outward when you move it close to the centre
Do not resist this movement, as it may damage the automatic return mechanism.

If the tonearm does not return to its armrest
Press REJECT.

SCHEMATIC DIAGRAMS



WIRING

(PS-LX56)

A

B

C

D

E

F

G

H

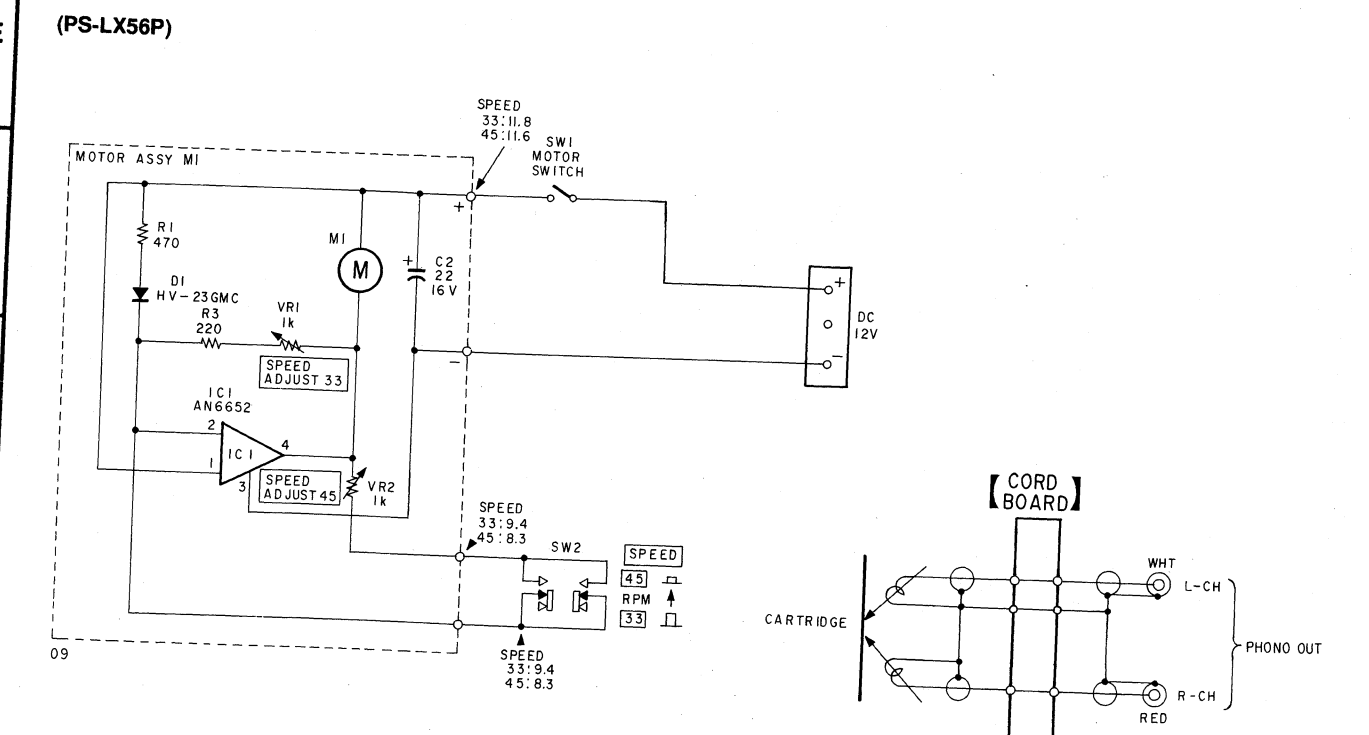
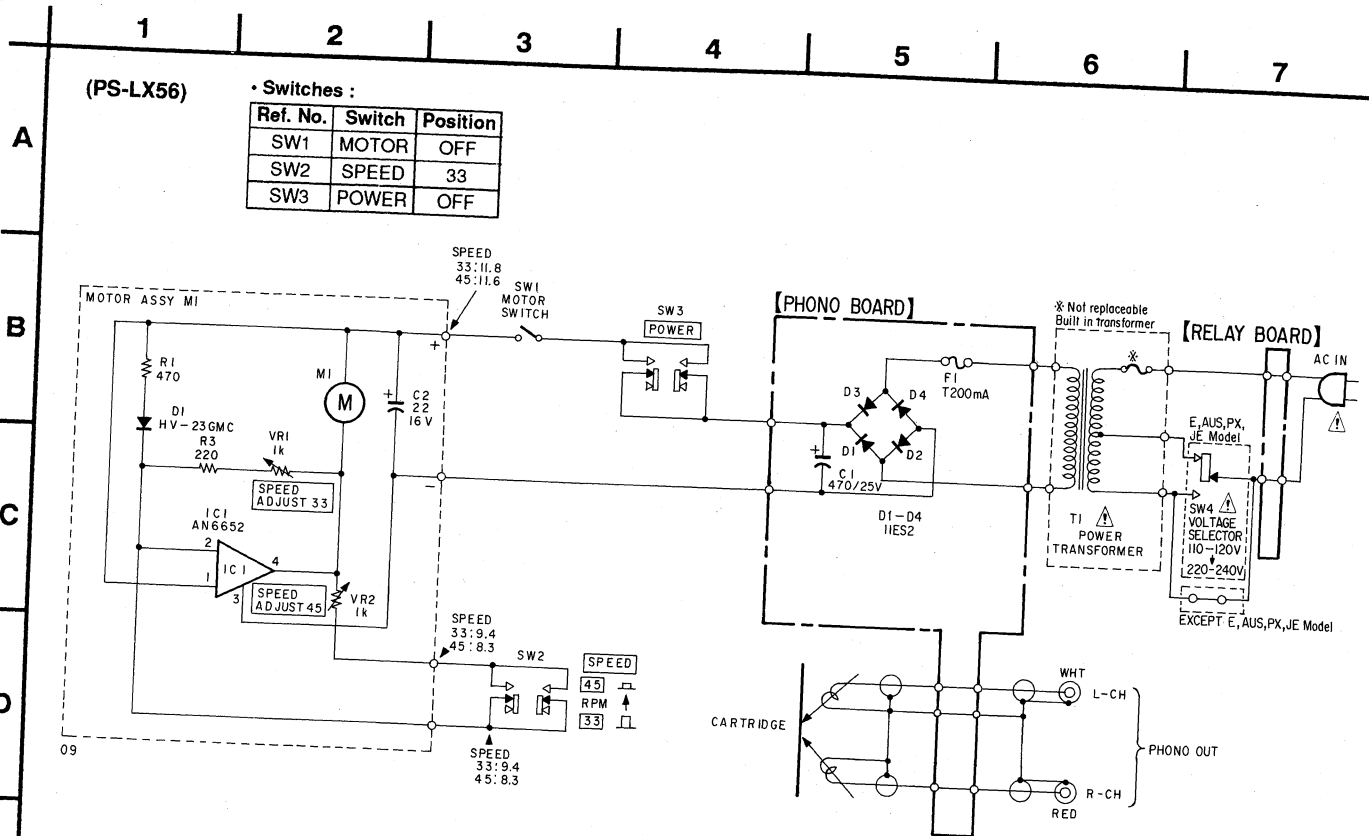
I

J

Note:

SCHEMATIC DIAGRAMS

PS-LX56/LX56P



Note:

- All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.

AUS : Australian model
JE : Tourist model

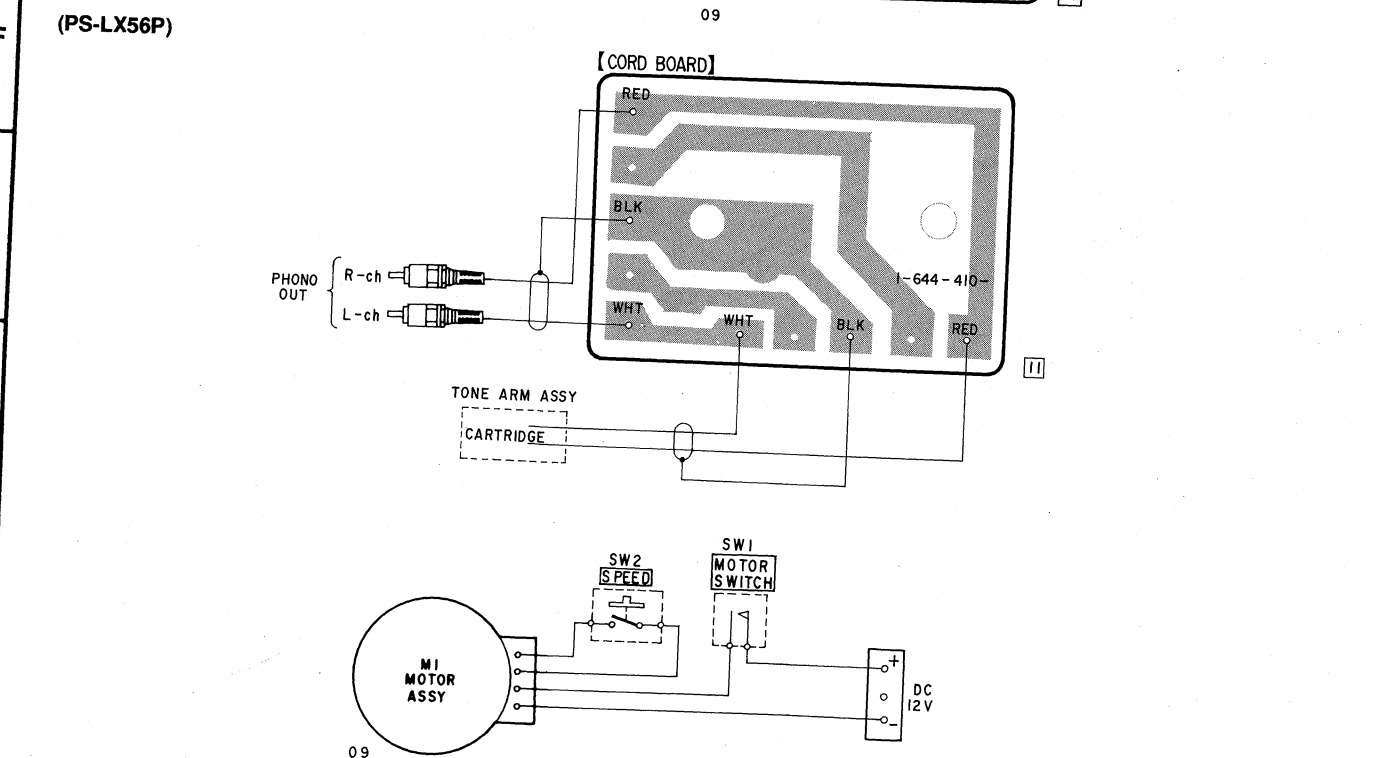
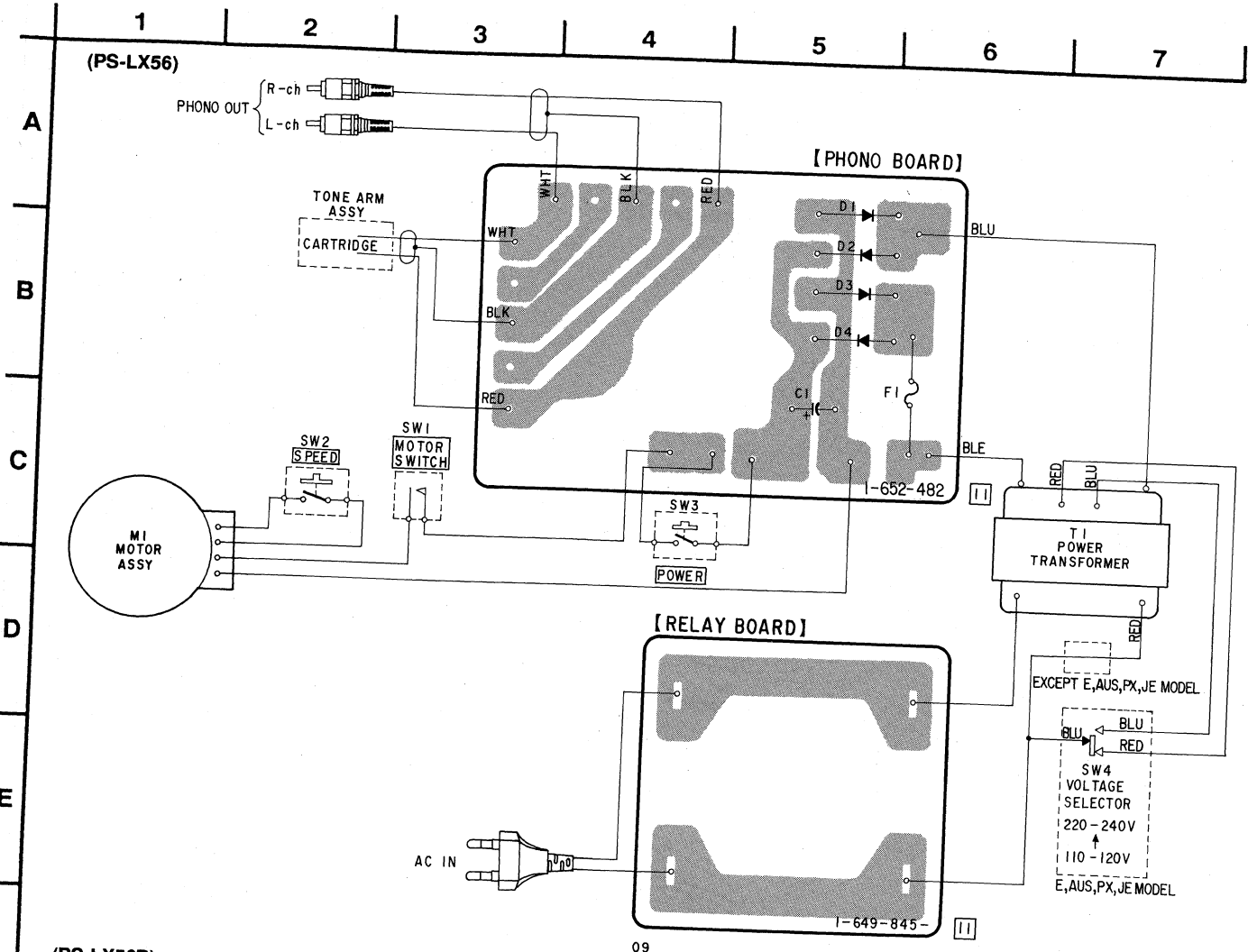
• Switches :

Ref. No.	Switch	Position
SW1	MOTOR	OFF
SW2	SPEED	33
SW3	POWER	OFF
SW4	VOLTAGE SELECTOR	240V

The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

WIRING DIAGRAMS



Note:

- : parts extracted from the component side.

AUS : Australian model
JE : Tourist model

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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-950-497-01	FOOT SEAT		M1	A-4604-945-A	MOTOR ASSY	
2	4-950-490-01	PLASTIC STAND		SW1	1-570-666-11	SWITCH (LEAF)	
* 3	4-961-804-01	BUTTON BOARD		SW2	1-571-089-11	SWITCH, PUSH (SPEED) (1 KEY)	
Δ 4	1-575-651-61	CORD, AC (LX56: AEP, EA, EE, IT, MX, MY, CIS, SP)		SW3	1-692-211-11	SWITCH, PUSH (POWER) (1 KEY) (LX56)	
Δ 4	1-575-975-11	CORD, AC (LX56: CND, US)		Δ SW4	1-692-835-11	VOLTAGE SELECTOR (LX-56: AUS, E, MX, MY, SP)	
Δ 4	1-590-074-11	CORD, AC (LX56: E)		Δ T1	1-450-987-11	TRANSFORMER, POWER (LX56: AEP, EE, IT, CIS)	
Δ 4	1-690-608-11	CORD, AC (LX56: AUS)		Δ T1	1-450-987-21	TRANSFORMER, POWER (LX56: AUS, E, PX, EA, JE, MX, SP)	
5	1-555-116-11	CORD, PHONO		Δ T1	1-450-987-31	TRANSFORMER, POWER (LX56: MY)	
6	4-964-177-01	KNOB SPEED		Δ T1	1-450-987-41	TRANSFORMER, POWER (LX56: U, CA)	
7	4-964-178-01	KNOB REJECT					
8	4-964-184-01	KNOB POWER (LX56)					
9	4-947-487-01	RETURN LINK					
10	4-890-173-00	WASHER					
11	3-659-350-00	WASHER					
12	A-4604-947-A	RETURN ASSY, LEVER					
13	4-947-485-01	SPRING (22)					
14	4-947-510-01	NUT					
15	4-947-491-01	ARM REST					
16	A-4660-499-A	ARM CLIP ASSY					
17	4-947-477-01	CUEING (BASE)					
18	4-947-468-01	LEVER, CUEING					
19	4-963-537-01	SPRING					
20	4-963-536-01	LINK RETURN					
21	4-963-535-01	ADJUST CAM					
22	4-947-514-01	4MM CS RING					
23	4-947-467-01	SPRING (6)					
24	4-947-466-01	TONE ARM ELEVATOR					
25	A-4660-498-A	HINGE ASSY					
26	A-4660-577-A	FRONT PANEL (G) ASSY (LX56: GRAY) (US)					
26	A-4660-578-A	FRONT PANEL (G) ASSY (LX56: BLACK)					
26	A-4660-976-A	FRONT PANEL (G) ASSY (LX56P)					
* 27	4-950-487-01	MAIN CABINET (B)					
28	4-947-505-01	CUSHION MOTOR					
29	4-947-504-01	COLLAR					
30	3-451-162-00	WASHER (56)					
31	3-701-445-21	WASHER					
32	4-947-498-01	STELL BALL					
33	4-947-497-01	GEAR					
34	4-947-496-01	SPRING (34)					
35	4-947-495-01	WIPER REJECT					
36	4-948-101-01	SPRING (38)					
37	A-4604-916-A	GEAR ASSY, SPUR					
38	4-947-503-01	BELT					
39	4-947-494-01	TURNTABLE PLATTER					
40	4-947-539-01	RUBBER MAT					
41	A-4604-946-A	DUST COVER ASSY					
* 42	1-652-482-11	PHONO BOARD (LX56)					
* 42	1-644-410-11	CORD BOARD (LX56P)					
43	4-948-095-01	COVER, CARTRIDGE					
44	4-951-290-01	STYLUS (CN-234)					
45	A-4604-940-A	ARM ASSY, TONE					
46	4-947-464-01	COUNTER WEIGHT					
47	4-952-961-01	SCREW (LX56)					
* 48	1-649-845-11	RELAY BOARD (LX56)					
49	1-557-109-21	CORD, DC (LX56P)					

CORD PHONO RELAY

ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
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All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable
- Items marked "X" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Hardware (# mark) list is given in the last of this parts list.

- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA...: μ PA...,
uPB...: μ PB..., uPC...: μ PC...,
uPD...: μ PD...
- CAPACITORS
uF: μ F
- COILS
uH: μ H
- AUS: Australian model
- CND: Canadian model
- EE: East European model
- IT: Italian model
- MX: Mexican model
- EA: Saudi Arabia model
- SP: Singapore model
- MY: Malaysia model
- JE: Tourist

The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	1-644-410-11	CORD BOARD (LX56P)				ACCESSORIES & PACKING MATERIALS	
		*****				*****	
		*****				4-758-045-11	MANUAL INSTRUCTION
						(English, French, Spanish, Portuguese) (LX56 AEP, CND)	
*	1-652-482-11	PHONO BOARD (LX56)				4-758-045-21	MANUAL INSTRUCTION (English) (LX56 US)
		*****				4-758-045-41	MANUAL INSTRUCTION
						(German, Dutch, Swedish, Italian) (LX56 AEP, IT)	
		< CAPACITOR >				4-758-045-51	MANUAL INSTRUCTION
						(English, French, Spanish, Chinese)	
C1	1-126-012-11	ELECT 470uF	16V			(LX56 AUS, E, PX, MX, EA, MY, SP, JE)	
		< DIODE >				4-758-045-61	MANUAL INSTRUCTION
						(English, German, Polish) (LX56 EE, CIS)	
D1	8-719-200-82	DIODE 11ES2		*		4-947-532-01	SNOW BOX (L)
D2	8-719-200-82	DIODE 11ES2		*		4-947-533-01	SNOW BOX (R)
D3	8-719-200-82	DIODE 11ES2					
D4	8-719-200-82	DIODE 11ES2				*****	
		< FUSE >				*****	
Δ F1	1-532-613-XX	FUSE TIME-LAG (T200mA)				HARDWARE LIST	
		*****				*****	
*	1-649-845-11	RELAY BOARD (LX56)		#1	7-621-773-87	SCREW (64)	
		*****		#2	7-623-210-22	WASHER (57)	
		*****		#3	7-624-110-04	6MM E RING	
				#4	7-685-105-01	SCREW (59)	
				#5	7-685-645-79	SCREW (68)	
				#6	7-685-646-79	SCREW (60)	
				#7	7-685-647-79	SCREW (58)	
				#8	7-688-005-01	WASHER (69)	

9-959-216-11

Sony Corporation
Audio Group

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93K09102-1
Printed in Japan
© 1993.11
Published by Audio Sector Quality Assurance Dept.

PS-LX56/LX56P

SERVICE MANUAL



PHOTO : PS-LX56

PS-LX56/LX56P are the turntable section in LBT-A190/A195/A290/A290K/A295/A390/A390K/A395/A490/A490K/A495/D150/D250/D550/G1000/G2000.

US Model
Canadian Model
PX Model
Tourist Model
PS-LX56
AEP Model
E Model
Australian Model
PS-LX56/LX56P
UK Model
PS-LX56P

SPECIFICATIONS

Turntable

Platter
Motor
Drive system
Speed
Wow and flutter
Signal-to-noise ratio
Automatic system

(PS-LX56)

30cm (12 in.)
DC servo motor
Belt drive
33 1/3 rpm/45 rpm switchable
0.2% (WRMS)
60 dB (DIN-B)
Return, reject

Tonearm

Type
Pivot-to-stylus length
Overall arm length

Dynamically balanced
203 mm (8 in.)
235 mm (9 1/4 in.)

Cartridge

Type
Frequency response
Stylus

Moving magnet type
20 Hz-20kHz
CN-234

General

Dimensions

355 × 94 × 345 mm(w/h/d)
(14 × 3 3/4 × 13 5/8 inches)
Approx. 2.5 kg (5 lb 8 oz)

Weight

Power requirement

US and Canadian model : 120V AC, 60Hz
European model : 220-230V AC, 50/60Hz
Australian model : 240V AC, 50Hz
Model for other countries : 110-120V/220-240V
adjustable with the
voltage selector
AC, 50/60Hz

Power consumption
Accessory supplied
Optional accessories

2 W
45-rpm adaptor (1)
Replacement stylus CN-234
Stat spray XP-C10
Cleaner XP-C1, XP-C2

Turntable

Platter
Tone arm type
Cartridge type
Stylus
Mass
Dimensions

(PS-LX56P)

30 cm
Dynamically balanced
Moving magnet type
Sony CN-234 (0.6 mil diamond)
Approx. 2.3 kg (5 lb 1 oz)
Approx. 355 x 95 x 345 mm
(14 x 3 3/4 x 13 5/8 inches)
(w/h/d, including projections)

Design and specifications subject to change without notice.

Note

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

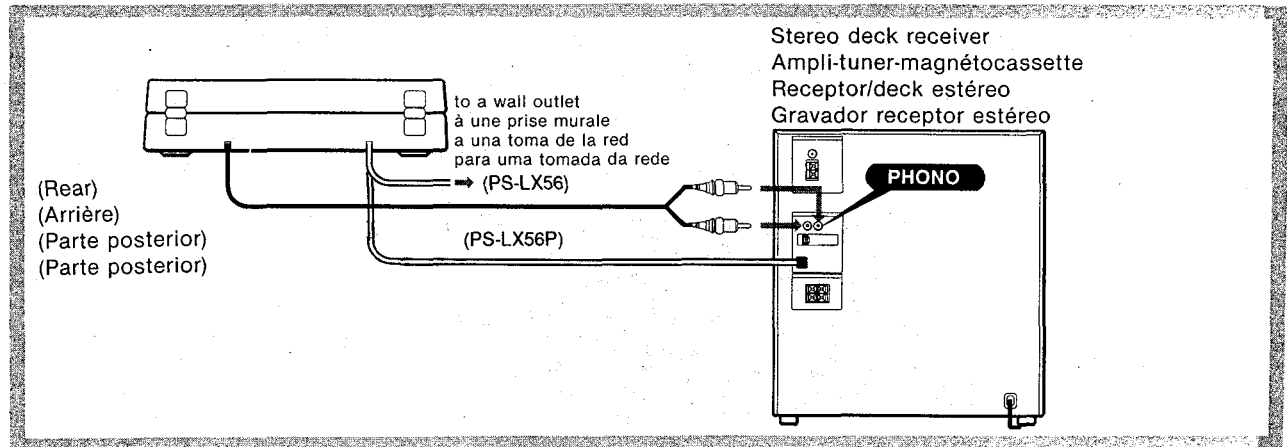
STEREO TURNTABLE SYSTEM
SONY®



Connections

Note

Connect the red plug to the right-channel jack (R), and the white plug to the left-channel jack (L).



Notes on installation

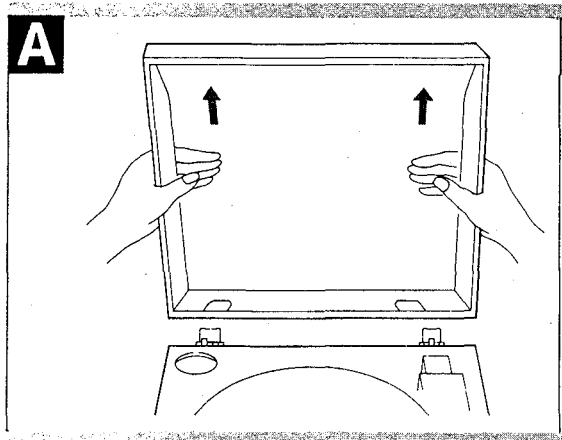
- Place the turntable on a level surface.
- Avoid placing the unit near electrical appliances (such as a television, hair dryer, or fluorescent lamp) which may cause hum or noise.
- Place the turntable where it will not be subject to any vibration, such as from speakers, slamming of doors, etc.
- Keep the unit away from direct sunlight, extremes of temperature, and excessive dust and moisture.

Nota

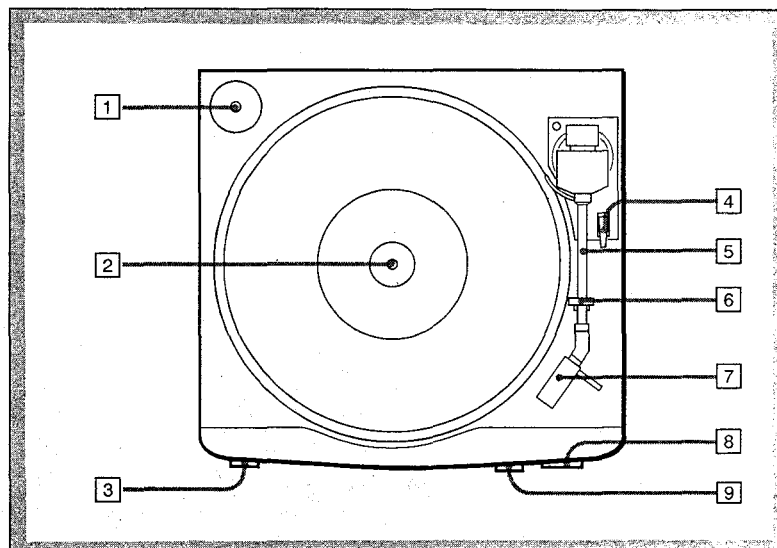
Conecte la clavija roja a la toma del canal derecho (R), y la blanca a la del canal izquierdo (L).

To remove the dust cover **A**

Open the cover fully and pull it up.

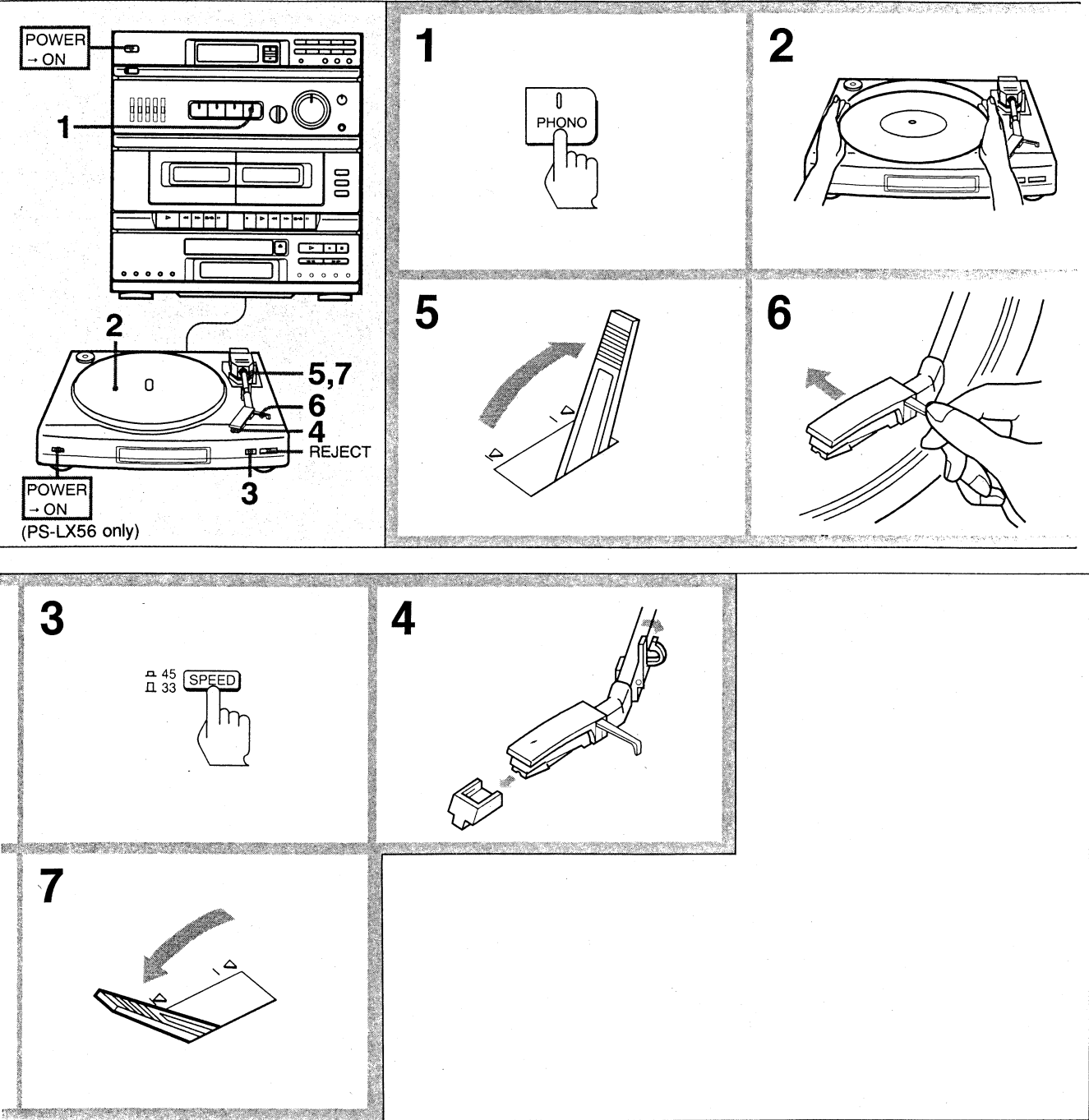


Location of Controls



- 1 45-rpm adaptor
- 2 Centre spindle
- 3 POWER switch (PS-LX56)
- 4 Cueing lever
- 5 Tonearm
- 6 Armrest
- 7 Cartridge
- 8 REJECT button
- 9 Speed selector

Playing Records



When the record is played to the end, the tonearm returns to the armrest and the turntable stops.

To stop during play, press REJECT.

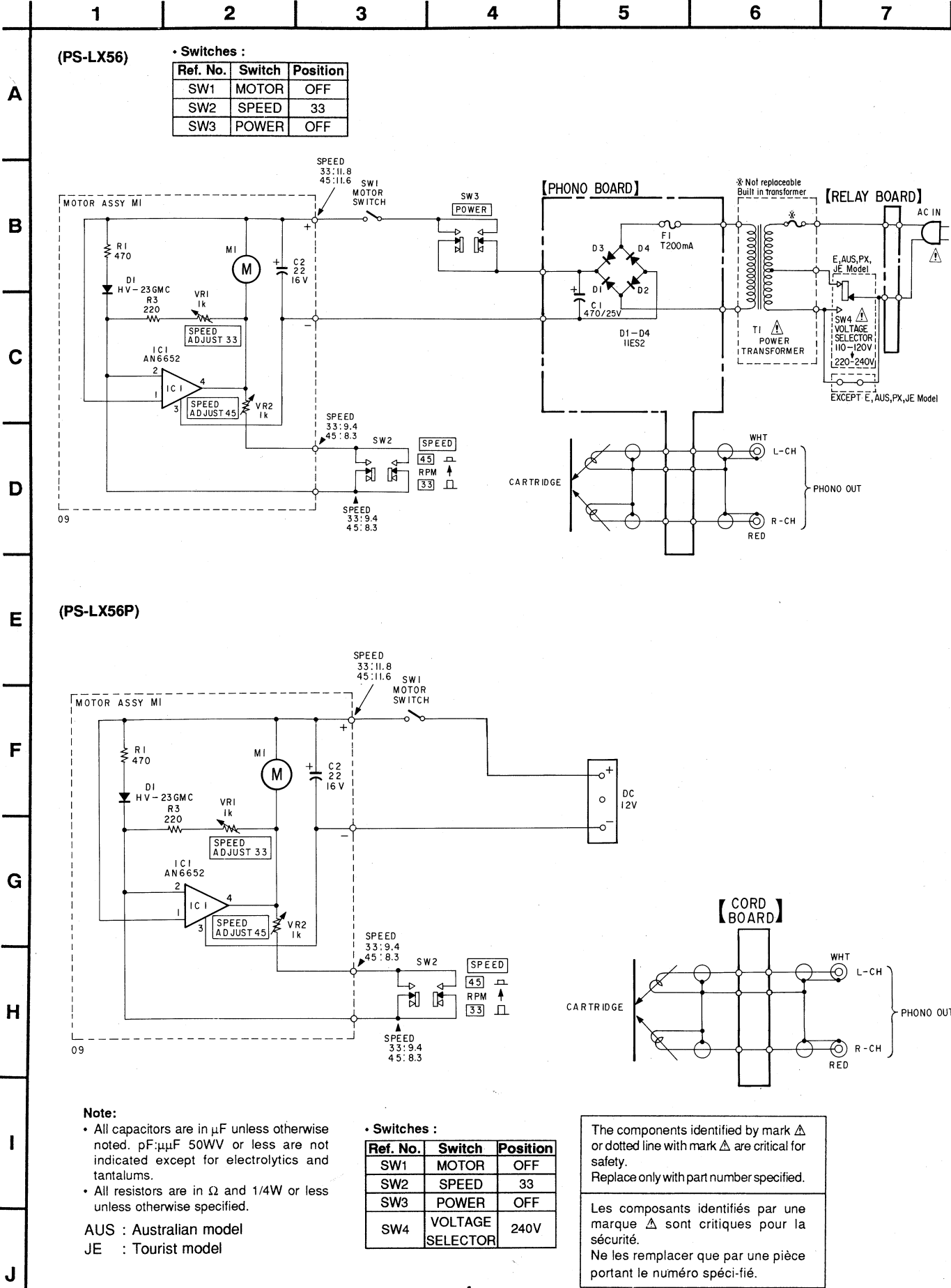
To play a different part of the record
Lift the tonearm by setting the cueing level to ∇ , move the tonearm by hand to the desired point, then set the cueing lever to ∇ .

To play a 17-cm record
Use the supplied adaptor

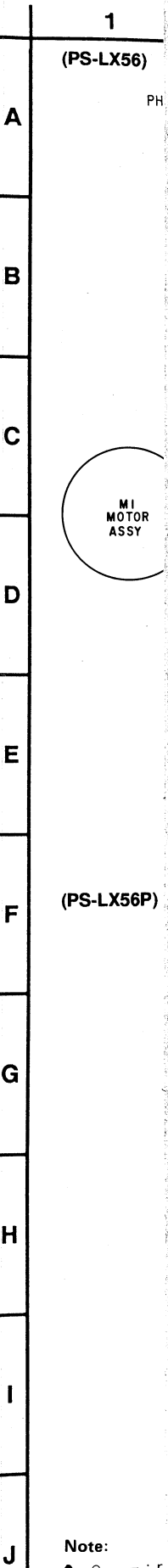
If the tonearm moves outward when you move it close to the centre
Do not resist this movement, as it may damage the automatic return mechanism.

If the tonearm does not return to its armrest
Press REJECT.

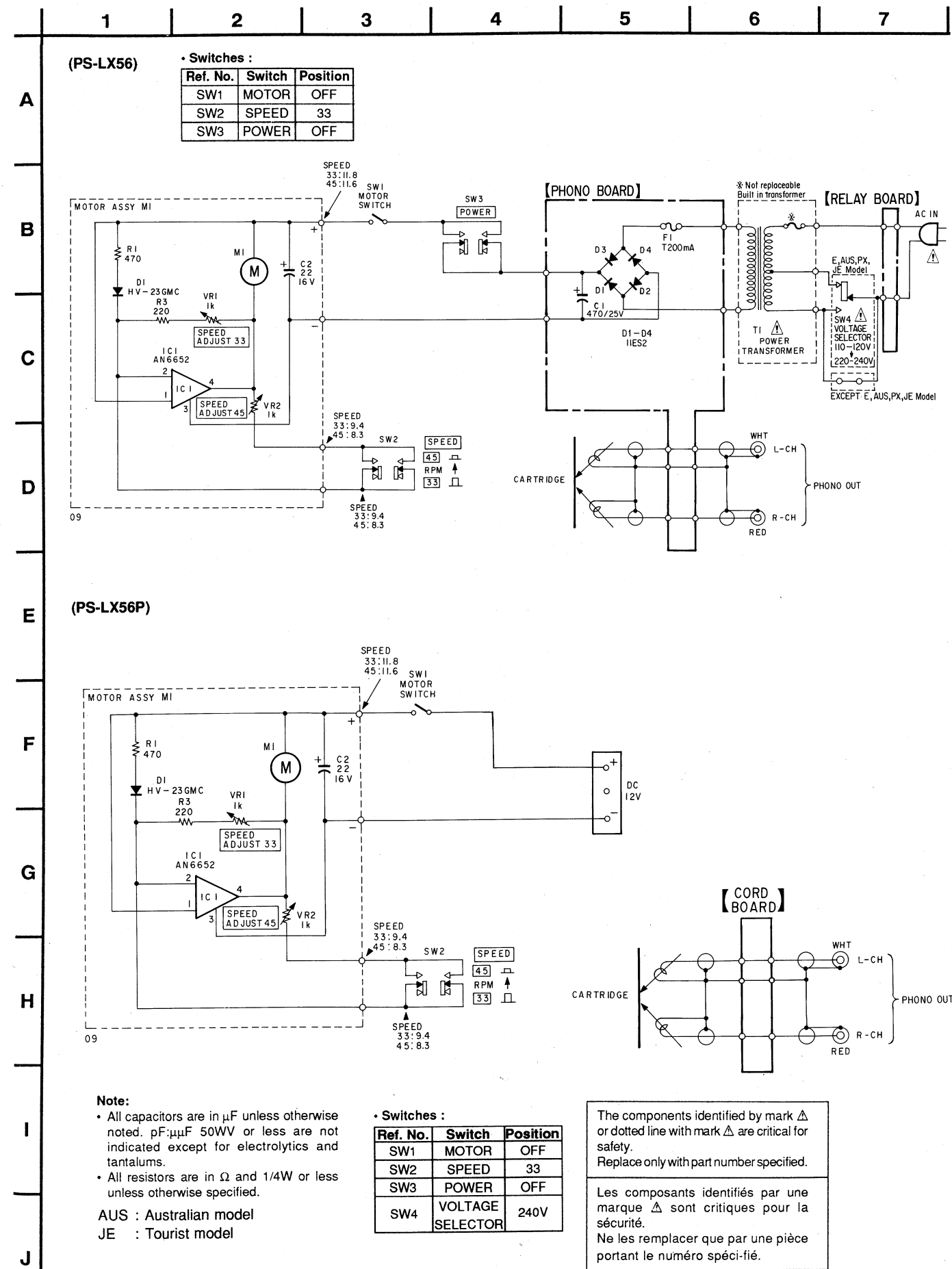
SCHEMATIC DIAGRAMS



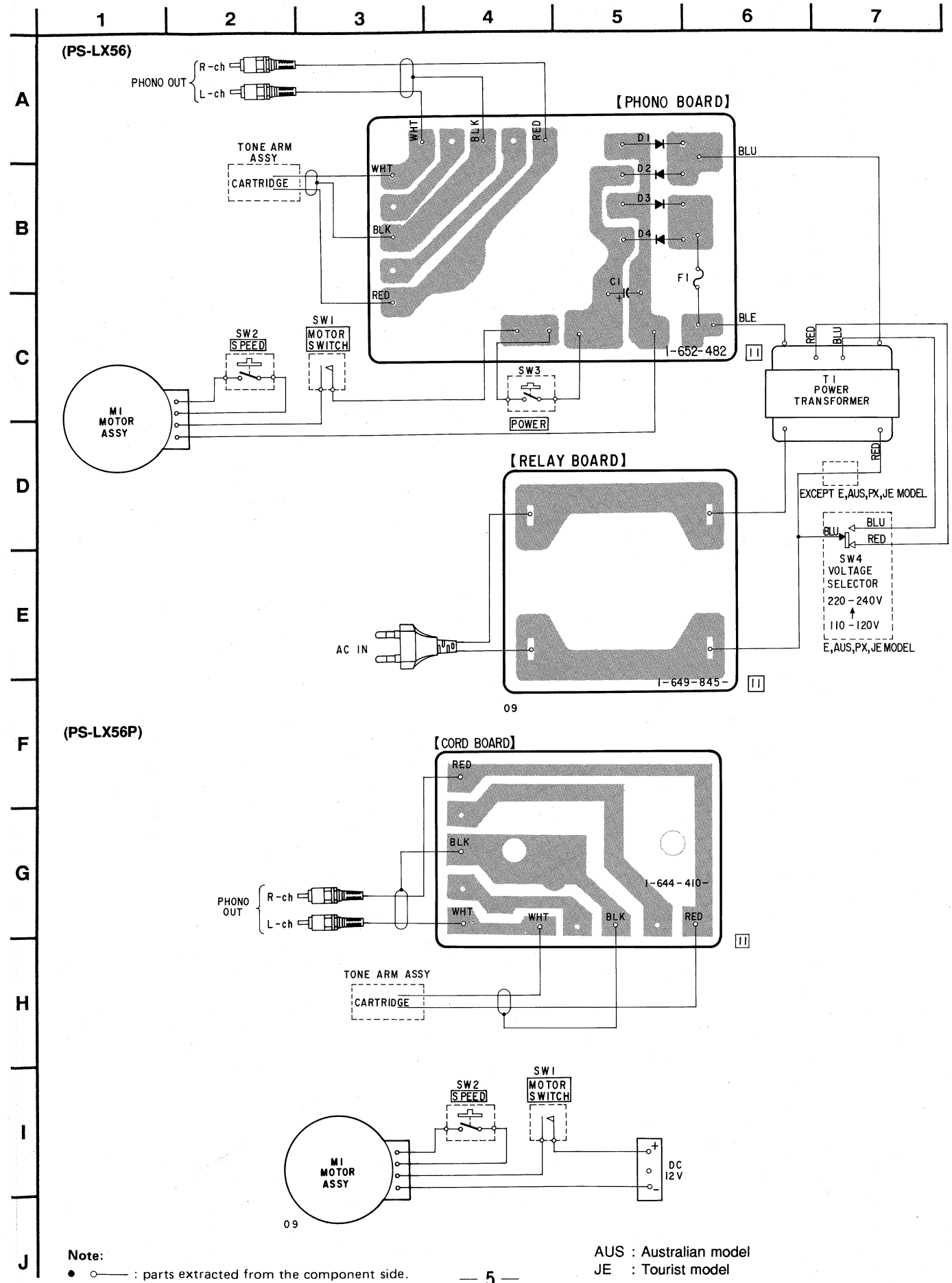
WIRING DI



SCHEMATIC DIAGRAMS



WIRING DIAGRAMS



EXPLODED VIEW

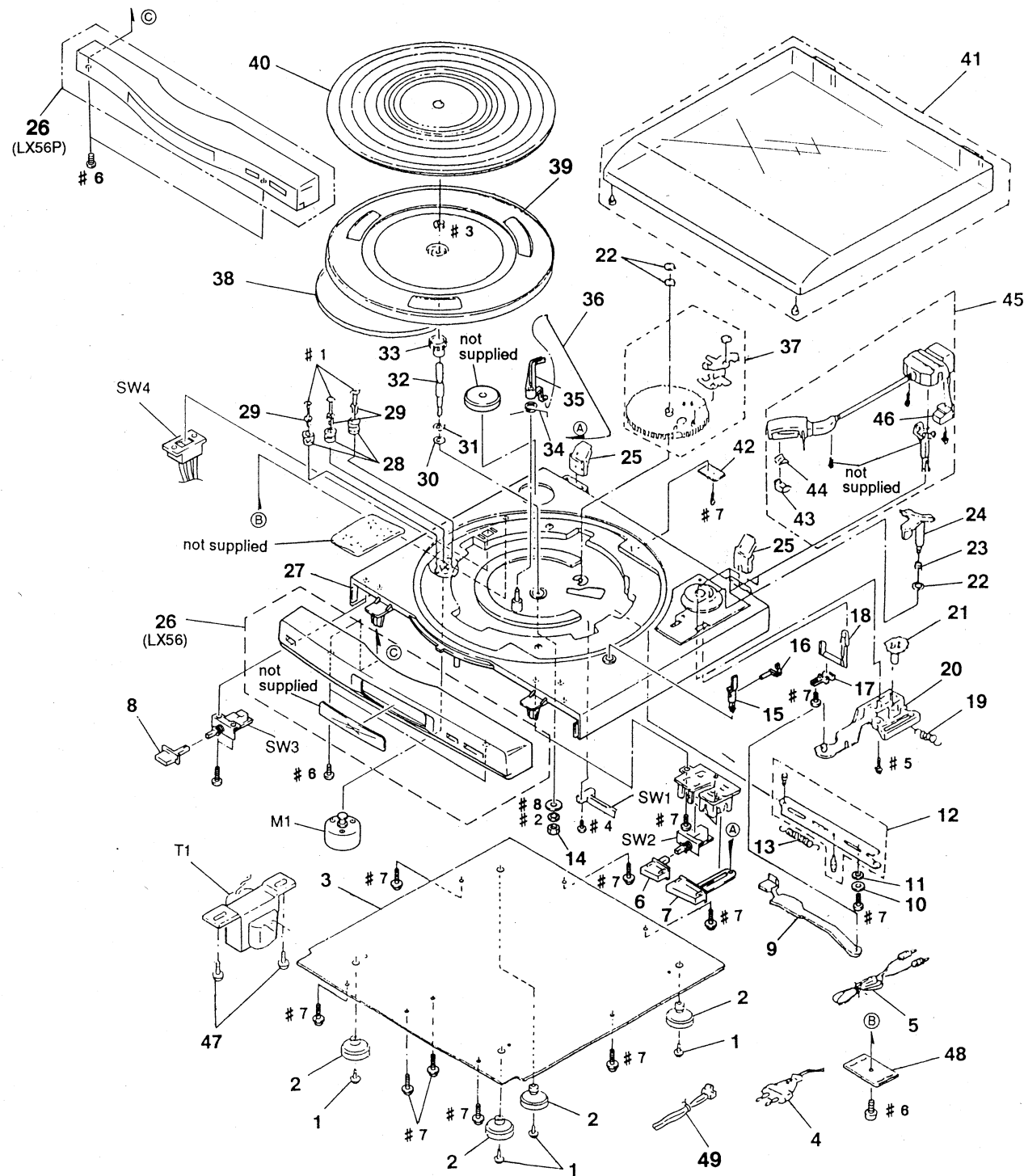
NOTE:

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

- AUS : Australian model
- CND : Canadian model
- EE : East European model
- IT : Italian model
- MX : Mexican model
- EA : Saudi Arabia model
- SP : Singapore model
- MY : Malaysia model
- JE : Tourist

The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-950-497-01	FOOT SEAT		M1	A-4604-945-A	MOTOR ASSY	
2	4-950-490-01	PLASTIC STAND		SW1	1-570-666-11	SWITCH (LEAF)	
* 3	4-961-804-01	BUTTON BOARD		SW2	1-571-089-11	SWITCH, PUSH (SPEED) (1 KEY)	
Δ 4	1-575-651-61	CORD, AC (LX56: AEP, EA, EE, IT, MX, MY, CIS, SP)		SW3	1-692-211-11	SWITCH, PUSH (POWER) (1 KEY) (LX56)	
Δ 4	1-575-975-11	CORD, AC (LX56: CND, US)		Δ SW4	1-692-835-11	VOLTAGE SELECTOR (LX-56: AUS, E, MX, MY, SP)	
Δ 4	1-590-074-11	CORD, AC (LX56: E)		Δ T1	1-450-987-11	TRANSFORMER, POWER (LX56: AEP, EE, IT, CIS)	
Δ 4	1-690-608-11	CORD, AC (LX56: AUS)		Δ T1	1-450-987-21	TRANSFORMER, POWER (LX56: AUS, E, PX, EA, JE, MX, SP)	
5	1-555-116-11	CORD, PHONO		Δ T1	1-450-987-31	TRANSFORMER, POWER (LX56: MY)	
6	4-964-177-01	KNOB SPEED		Δ T1	1-450-987-41	TRANSFORMER, POWER (LX56: U, CA)	
7	4-964-178-01	KNOB REJECT					
8	4-964-184-01	KNOB POWER (LX56)					
9	4-947-487-01	RETURN LINK					
10	4-890-173-00	WASHER					
11	3-659-350-00	WASHER					
12	A-4604-947-A	RETURN ASSY, LEVER					
13	4-947-485-01	SPRING (22)					
14	4-947-510-01	NUT					
15	4-947-491-01	ARM REST					
16	A-4660-499-A	ARM CLIP ASSY					
17	4-947-477-01	CUEING (BASE)					
18	4-947-468-01	LEVER, CUEING					
19	4-963-537-01	SPRING					
20	4-963-536-01	LINK RETURN					
21	4-963-535-01	ADJUST CAM					
22	4-947-514-01	4MM CS RING					
23	4-947-467-01	SPRING (6)					
24	4-947-466-01	tone ARM ELEVATOR					
25	A-4660-498-A	HINGE ASSY					
26	A-4660-577-A	FRONT PANEL (G) ASSY (LX56: GRAY) (US)					
26	A-4660-578-A	FRONT PANEL (G) ASSY (LX56: BLACK)					
26	A-4660-976-A	FRONT PANEL (G) ASSY (LX56P)					
* 27	4-950-487-01	MAIN CABINET (B)					
28	4-947-505-01	CUSHION MOTOR					
29	4-947-504-01	COLLAR					
30	3-451-162-00	WASHER (56)					
31	3-701-445-21	WASHER					
32	4-947-498-01	STELL BALL					
33	4-947-497-01	GEAR					
34	4-947-496-01	SPRING (34)					
35	4-947-495-01	WIPER REJECT					
36	4-948-101-01	SPRING (38)					
37	A-4604-916-A	GEAR ASSY, SPUR					
38	4-947-503-01	BELT					
39	4-947-494-01	TURNTABLE PLATTER					
40	4-947-539-01	RUBBER MAT					
41	A-4604-946-A	DUST COVER ASSY					
* 42	1-652-482-11	PHONO BOARD (LX56)					
* 42	1-644-410-11	CORD BOARD (LX56P)					
43	4-948-095-01	COVER, CARTRIDGE					
44	4-951-290-01	STYLUS (CN-234)					
45	A-4604-940-A	ARM ASSY, TONE					
46	4-947-464-01	COUNTER WEIGHT					
47	4-952-961-01	SCREW (LX56)					
* 48	1-649-845-11	RELAY BOARD (LX56)					
49	1-557-109-21	CORD, DC (LX56P)					

ELECTRIC

NOTE:

- Due to standardization, the list may be different from the diagram.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTOR: All resistors are standard metal oxide film type. F: nonflammable.
- Items marked with * are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Hardware parts are not stocked.

Ref. No. Part No.

* 1-6

* 1-6

C1 1-1

D1 8-7

D2 8-7

D3 8-7

D4 8-7

 Δ F1 1-5

* 1-6

identified by mark
a mark Δ are
part number
identified par une
marque Δ sont critiques pour la
sécurité.
Ne les remplacer que par une pièce
portant le numéro spécifié.

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Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
1	4-950-497-01	FOOT SEAT		M1	A-4604-945-A	MOTOR ASSY	
2	4-950-490-01	PLASTIC STAND		SW1	1-570-666-11	SWITCH (LEAF)	
* 3	4-961-804-01	BUTTON BOARD		SW2	1-571-089-11	SWITCH, PUSH (SPEED) (1 KEY)	
Δ 4	1-575-651-61	CORD, AC (LX56: AEP, EA, EE, IT, MX, MY, CIS, SP)		SW3	1-692-211-11	SWITCH, PUSH (POWER) (1 KEY) (LX56)	
Δ 4	1-575-975-11	CORD, AC (LX56: CND, US)		Δ SW4	1-692-835-11	VOLTAGE SELECTOR (LX-56: AUS, E, MX, MY, SP)	
Δ 4	1-590-074-11	CORD, AC (LX56: E)		Δ T1	1-450-987-11	TRANSFORMER, POWER (LX56: AEP, EE, IT, CIS)	
Δ 4	1-690-608-11	CORD, AC (LX56: AUS)		Δ T1	1-450-987-21	TRANSFORMER, POWER	
5	1-555-116-11	CORD, PHONO				(LX56: AUS, E, PX, EA, JE, MX, SP)	
6	4-964-177-01	KNOB SPEED		Δ T1	1-450-987-31	TRANSFORMER, POWER (LX56: MY)	
7	4-964-178-01	KNOB REJECT		Δ T1	1-450-987-41	TRANSFORMER, POWER (LX56: U, CA)	
8	4-964-184-01	KNOB POWER (LX56)					
9	4-947-487-01	RETURN LINK					
10	4-890-173-00	WASHER					
11	3-659-350-00	WASHER					
12	A-4604-947-A	RETURN ASSY, LEVER					
13	4-947-485-01	SPRING (22)					
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16	A-4660-499-A	ARM CLIP ASSY					
17	4-947-477-01	CUEING (BASE)					
18	4-947-468-01	LEVER, CUEING					
19	4-963-537-01	SPRING					
20	4-963-536-01	LINK RETURN					
21	4-963-535-01	ADJUST CAM					
22	4-947-514-01	4MM CS RING					
23	4-947-467-01	SPRING (6)					
24	4-947-466-01	TONE ARM ELEVATOR					
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26	A-4660-577-A	FRONT PANEL (G) ASSY (LX56: GRAY) (US)					
26	A-4660-578-A	FRONT PANEL (G) ASSY (LX56: BLACK)					
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29	4-947-504-01	COLLAR					
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* 42	1-652-482-11	PHONO BOARD (LX56)					
* 42	1-644-410-11	CORD BOARD (LX56P)					
43	4-948-095-01	COVER, CARTRIDGE					
44	4-951-290-01	STYLUS (CN-234)					
45	A-4604-940-A	ARM ASSY, TONE					
46	4-947-464-01	COUNTER WEIGHT					
47	4-952-961-01	SCREW (LX56)					
* 48	1-649-845-11	RELAY BOARD (LX56)					
49	1-557-109-21	CORD, DC (LX56P)					

CORD PHONO RELAY

ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Hardware (# mark) list is given in the last of this parts list.

- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA...: μ PA...,
uPB...: μ PB..., uPC...: μ PC...,
uPD...: μ PD...
- CAPACITORS
uF: μ F
- COILS
uH: μ H
- AUS: Australian model
- CND: Canadian model
- EE: East European model
- IT: Italian model
- MX: Mexican model
- EA: Saudi Arabia model
- SP: Singapore model
- MY: Malaysia model
- JE: Tourist

The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
*	1-644-410-11	CORD BOARD (LX56P)				ACCESSORIES & PACKING MATERIALS	
		*****				*****	
		*****				4-758-045-11	MANUAL INSTRUCTION
						(English, French, Spanish, Portuguese) (LX56 AEP, CND)	
*	1-652-482-11	PHONO BOARD (LX56)				4-758-045-21	MANUAL INSTRUCTION (English) (LX56 US)
		*****				4-758-045-41	MANUAL INSTRUCTION
						(German, Dutch, Swedish, Italian) (LX56 AEP, IT)	
		< CAPACITOR >				4-758-045-51	MANUAL INSTRUCTION
						(English, French, Spanish, Chinese)	
C1	1-126-012-11	ELECT 470uF	16V			(LX56 AUS, E, PX, MX, EA, MY, SP, JE)	
		< DIODE >				4-758-045-61	MANUAL INSTRUCTION
						(English, German, Polish) (LX56 EE, CIS)	
D1	8-719-200-82	DIODE 11ES2		*	4-947-532-01	SNOW BOX (L)	
D2	8-719-200-82	DIODE 11ES2		*	4-947-533-01	SNOW BOX (R)	
D3	8-719-200-82	DIODE 11ES2					
D4	8-719-200-82	DIODE 11ES2					
		< FUSE >				*****	
Δ F1	1-532-613-XX	FUSE TIME-LAG (T200mA)				*****	
						HARDWARE LIST	

		*****		#1	7-621-773-87	SCREW (64)	
				#2	7-623-210-22	WASHER (57)	
*	1-649-845-11	RELAY BOARD (LX56)		#3	7-624-110-04	6MM E RING	
		*****		#4	7-685-105-01	SCREW (59)	
				#5	7-685-645-79	SCREW (68)	
		*****		#6	7-685-646-79	SCREW (60)	
				#7	7-685-647-79	SCREW (58)	
				#8	7-688-005-01	WASHER (69)	